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EDITED BY WILLIAM HUNTING, F.R.C.V.S.

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FOOT-AND-MOUTH DISEASE.

We are accustomed to invasions of this disease at intervals of a year or two: but it is a little unusual for two apparently distinct ones to occur within four months. The last outbreak, at Chobham, occurred so recently as March last, and was promptly stamped out by the action of the Board of Agriculture. It appears just possible that the present one near Hounslow may give rather more trouble. The disease was first detected in the pigs of one farm; but we understand that it has since been found among the cattle of a neighbouring one, and of course further centres of infection may yet be discovered. There seems, however, no cause for alarm. The Board of Agriculture is taking all necessary measures, a keen lookout is being kept throughout the surrounding districts, and we may confidently expect that the same authority which has stifled so many former outbreaks in their inception will be equally successful with this one.

Generally, outbreaks in this country occur not far from a port, and always when disease exists on the Continent. Considering the numerous media which are capable of conveying infection from Europe here, and the impossibility of preventing such conveyance without unwarrantable interference with trade, it seems clear that whenever foot-and-mouth disease prevails in the nearer European countries, Great Britain will never be safe from visitations of it. Thanks solely to the Board of Agriculture, these visitations have done us very little harm of late years; but their frequence illustrates the necessity for an efficient public veterinary service. Those who can remember some British outbreaks of foot-and-mouth disease in old years, or who have seen its present ravages in another part of the world, will agree that the Board's officials amply repay their upkeep to the nation by their work in connection with this one disease alone.

THE DICK COLLEGE.

It seems that the Dick School is to undergo a development that would once have seemed impossible in connection with veterinary teaching in this kingdom. The purchase of a site of 1½ acres, and the intention to erect new College buildings thereon at an estimated cost of £50,000 will speak for themselves to those who know how often and how seriously the activity of our training Colleges has been hampered by financial difficulties. The historic Edinburgh School had its share of these in the past, and nevertheless did good work. We shall all be glad to see this signal increase in its facilities for work.

RESEARCHES ON THE TREATMENT OF LIVER-ROT IN SHEEP.—By M.M. RAILLIET, G. MOUSSU, and A. HENRY.

Dear Sir,—If you could find room in *The Veterinary Record* for the following translation of an article on Liver-Rot from the *Recueil de Médecine Vétérinaire* of 15th May last, you will much oblige. The subject is a very important one, the disease causing a greater loss to flockmasters in the British Islands than any other two diseases together. Towards the close of last session I called the attention of my class to the first series of experiments made at the instigation of the French Government and referred to in this article, and expressed my regret that no substance had been found which seemed to have the least effect on the flukes in the liver. Should the promise of the article be fulfilled and a satisfactory remedy found for "rot" in sheep it will be nothing short of a boon to the flockmaster.—I am etc.,

J. R. U. DEWAR.

Owing to the losses caused amongst French cattle for several months through the prevalence of fluke disease, at the instigation of the Minister of Agriculture we entered on an investigation and carried out some experiments for the purpose of finding an agent which would destroy the flukes in the bile ducts.

We have already described (*Ibid.* 15th April last, p. 236) several of these experiments. One series bearing on the action of medicines known to act on the liver as aloes, calomel, salicylate of soda, and "boldo"—the others various products—phosphorus, arsenic, mercury, etc., all of which gave only negative results.

We have been more fortunate in a new series which included particularly tartar-emetic, urotropine, atoxyl, and etherial extract of male shield fern.

The sheep treated were, as a rule, very seriously affected with the disease, badly infested with flukes and had been for a considerable time with an advanced cirrhosis, and often some distomes scattered in the peritoneal cavity—after having perforated Glisson's capsule. Most of them were infected at the same time by large flukes—Fasciola hepatica, and small flukes—Dicrocoelium lanceatum. We found these two species manifested a very different resistance to the action of medicines. The diagnosis was always verified in the living animal by microscopic examination of the fæces.

With tartar-emetic and urotropine the results have again been negative; with atoxyl we obtained

in one heifer only, the evacuation of some large flukes evidently wasted.

But the experiments with extract of male fern have been, on the other hand, pretty conclusive.

To our knowledge, Alessandrini is the only one who has recorded a positive result from the employment of this agent. In two sheep very seriously affected, which died two days after the administration of the medicine, he states that the very numerous flukes collected in the intestine, in the gall bladder, and in the bile ducts were dead and already wasted; but only a mere summary is given, and neither the dose of the extract, the duration of the treatment, the number of the flukes, nor the conditions found at the post-mortem.

Our experiments were carried out on five sheep, weighing from 55 to 70 lbs., all badly infested with flukes, and at a very advanced stage of the disease. Each dose, given by the mouth, consisted of 5 grammes of etherial extract mixed with 25 c.c. of oil Three sheep from the same lot were not treated but kept for comparison. The post-mortem of all the subjects was performed immediately after death, which is an essential condition for the true appreciation of the results.

The first received a single dose and died twelve hours after, its gall bladder and bile ducts contained 390 large flukes and numerous small flukes—all living.

The second received two doses at six hours interval, and was killed *in extremis* twenty-four hours after the second dose. The bile ducts contained numerous small flukes, all living, and 55 large flukes. Of these latter only four found in the smaller ducts were alive, the others were already wasted, stretched out, and of a yellowish green colour. The gall bladder contained 142 large flukes, dead, of which only three presented this characteristic change; the small intestine 16 wasted, and the large intestine 10 dead but not wasted.

The third received three doses at sixteen and twenty-four hours interval. It was killed three days after the last dose. The bile ducts contained some small flukes quite lively, but we did not find any large flukes in the ducts nor in the intestines. The gall bladder contained nine dead, and all wasted.

The fourth received four doses at twenty-four and forty-eight hours interval. It died seven hours after the last dose. The bile ducts contained numerous small flukes, all living, but no large flukes. The gall bladder contained five large flukes, dead and wasted, and about 50 quite lively in the peritoneal cavity, with lesions of peritonitis.

The fifth received four doses at forty-eight, twenty-four, and twenty-four hours interval. It was killed three days after the fourth dose. Post-mortem: some small flukes in the bile ducts quite alive. No large flukes found anywhere.

The three control sheep died, or were slaughtered, in the course of the experiments, and respectively contained in the bile ducts and gall bladder 178, 85, and 497 large flukes, and numerous small flukes—all living.

The alteration which takes place in the large flukes under the influence of the extract of male fern (and a little also from the atoxyl) is rather peculiar. It starts at the posterior extremity of the body, and gains little by little the anterior regions. We sometimes found individuals with a large part of the body already greenish, stretched out and wasted, whilst the part anterior to the ventral sucker had preserved its normal appearance and the cephalic prolongation effected various movements.

Another observation which seems to us of real importance is that when the large flukes lose their vitality in the liver, the bile loses the brownish colour which is one of the characteristics of "rot," and resumes its clear greenish tint and becomes quite limpid. The brown colour is due to the material excreted by the flukes from the mouth—unique opening of their digestive apparatus

It is well known that the elimination of the flukes represents but one part—certainly an important part—of the treatment, but it is permissible to hope for the recovery of the subjects if we can treat the animals at the commencement of the affection, and before those cirrhotic changes have taken place which are necessarily irreparable.

Summary.—Of all the medicinal agents we have tried to destroy the flukes in the liver of the sheep, one alone has seemed to give clear and positive results—etherial extract of male shield fern. Also, it seems to act, at least in the conditions in which we have tried it, only on the large flukes, and exclusively on those of the liver; it does not affect the parasites which have migrated to the peritoneal cavity. Four doses of 5 grammes each at least seem necessary in order to assure the success of the treatment.

It is expedient to add that the use of this therapeutic agent for liver rot, of which the action against worms in the alimentary canal is well known, allows it to act at the same time against other parasitic infestations of the digestive tube—more especially gastro-intestinal strongylosis.

Complementary Researches.

Since the presentation of this note . . . , we have repeated the treatment with male fern on four sheep, retaining as a control a fifth subject of the same lot. All these animals had been treated a month before with other medicines, but without success. Their fæces always contained in abundance the eggs of the large flukes. Each of these four sheep received daily for four consecutive days 5 grammes of the extract in 25 c.c. of oil. They were all slaughtered four days after the administration of the last dose, the post-mortem performed at once gave the following results:

No. 1. Weight 46lb. The liver did not contain a single large fluke, but presented very marked cirrhosis, proving that the disappearance of the parasites was quite recent. The bile was normal in appearance.

No. 2. Weight 66lb. We found two living large flukes in the smaller ducts, an adult and a young one, and three dead adults, wasted. Hepatic lesions moderate, bile of normal appearance.

No. 3. Weight over 70lb. The liver greatly altered contains still 26 large flukes living and one dead. Bile almost normal.

No. 4. Weight 53lb. Liver little affected, one large fluke still living. Bile of normal appearance.

No. 5 (control). Weight 64lb. Liver markedly cirrhotic, contains 296 large flukes all living. Bile brownish. In all those animals the dile ducts also contained a few small flukes living.

We see that all these results are in general agreement, and that the efficiency of the extract of male fern for the destruction of the flukes seems well confirmed.

It remains to find the exact dose of the medicine, the limits of tolerance, etc. In the last experiments we observe that the largest number of living flukes is met with in the heaviest sheep. Perhaps the dose had been rather too small for the subject. We propose to try 1 gramme for each 5 kilos. of live weight.

We are asked on all sides for indications concerning the treatment of cattle. Experiments with them are yet too incomplete to enable us to give definite directions. But they will be made in a similar manner, and with all the prudence necessary to avoid the toxic effects of the medicine. The average dose to start with will be about 30 grammes for a live weight of 6½ cwt. to 7½ cwt.

NILE EXPEDITION 1884-5.

(*Continued from p.* 11.)

VETERINARY SURGEON S. M. SMITH'S REPORT, NILE EXPEDITIONARY FORCE, 1884-85.

To the Principal Veterinary Surgeon, War Office, London.

Sir,

With reference to the recent operations of the Nile Expeditionary Force, I have the honour to submit the following report of my movements, etc. :

1. I was attached to the 19th Hussars, stationed at Abbassich, Cairo, under the command of Lieut.-Colonel P. H. Barrow, C.B., C.M.G., the regiment being ordered to proceed up the Nile on the 25th October, 1884.

As soon as the regiment received orders to be held in readiness, I applied for 400 sets of No. 1 shoes and sufficient nails, to be supplied by the Ordnance Store Department, at Kasr-el-Nil. The Regimental Quartermaster was unable to obtain this quantity, and to endeavour to make up the deficiency a number of locally made shoes and nails were supplied at the railway station as the regiment was leaving, and which I found, on examination, to be totally useless, the shoes beiug badly made, coarsely pritchelled, and too large, and the nails much too large for the purposes required. They were, therefore returned to the Ordnance Stores on the first opportunity.

2. Besides the No. 1 shoes I actually obtained from the Ordnance, I ordered the farriers to pack all the No. 1 Store shoes and any that they had in their possession.

3. Long before the regiment received orders to be held in readiness, I suggested to the Principal Veterinary Surgeon, Cairo—Veterinary Surgeon 1st Class, C. Clayton—that a large number of No. 1 shoes should be specially telegraphed for through the Ordnance, as I expected, in case the 19th Hussars were ordered on active service, they would be mounted on native horses. This, I believe, was done, but the shoes could not have arrived in Egypt in time. There was afterwards a great difficulty in obtaining shoes, and here I would most respectfully suggest that a smaller shoe should be kept by the Ordnance for colonial purposes, No. 1 shoes being generally too large.

4. The regiment proceeded dismounted to Wady Halfa. The portable portion of the regimental forge was taken to pieces, and conveyed with the heavy baggage. A small quantity of coal was also taken, which was afterwards almost invaluable, owing to the necessary alterations in the size of shoes to fit the small feet of the native horses.

5. At Assouan, E Troop was ordered to remain to collect a number of horses of the Egyptian Cavalry, and march to Wady Halfa. The remainder of the regiment proceeded by river in steamships. On the 13th Nov., 1884, 137 horses were handed over by Major Grenfell, Egyptian Army, to the 19th Hussars at Wady Halfa, and on the 14th 203 horses were handed over. They were mostly unshod, those that were so being roughly and badly shod by the native farriers. The regimental farriers immediately commenced to shoe, and remove the shoes of those already shod, where necessary, this work being completed as far as possible by the evening of the 21st. This, I consider, greatly redounds to the credit of Farrier-Major Short (since dead) and the regimental farriers, shoeing smiths, and assistants. All had to work very hard under most trying circumstances, the sun being very powerful during the day, and shelter unobtainable.

6. The regiment, with the exception of C. Troop, had marched from Wady Halfa by the 22nd. Sufficient shoes and nails for the 100 horses supposed to be marching in charge of E Troop from Assouan, were returned to store for them on arrival. The regimental field veterinary medicine chests and forge were sent by rail to Sarras station with the baggage, sufficient medicines being carried by each troop farrier to last until arrival at Sarras.

7. The horses taken over, though small, went through the campaign in excellent condition, considering the difficulty of forage and the weight to carry, and in crossing the desert between Korti and Matammeh they were at one time over 50 hours without water and very badly fed. Many returned from Matammeh with very bad sore backs. These were mostly cases of long standing injuries caused in former marches, large surfaces of skin having been destroyed, but not sloughed away. The cause was found to be the loop sewn on the girth strap, which was towards the body instead of towards the flap of the saddle (the saddlery was also taken over with the horses). This was altered in all the saddles ; and no fresh cases occurred. In the march between Wady Halfa and Korti camp, comparatively few cases of any kind were reported, and the march of the Headquarters having occupied the days between the 22nd November and the 20th December, one day's halt at Absarat on the 4th November, one day opposite Dongola on the 9th. The 13th, 14th, and 15th were occupied in crossing the river at a camp, Shabadood, about three miles beyond Handak. No further halts were made. At times the track led over rocky mountains, and it was fortunate that the horses were well shod ; at others, the track passed through sand ; but at times the ground was good, and allowing of much brisker motion, though most of the distance was done at the walk. To save the horses as much as possible, the men were made to dismount and walk short distances. The resources of the country, with regard to forage, will be treated of in a later paragraph.

8. At Korti, soon after arrival, one horse (G 70) died of enteritis. A case of farcy, and one of purpura-hæmorrhagica also occurred. The last two cases were imme-

diately destroyed, and no further symptoms of farcy or glanders appeared amongst the horses during the period I was in veterinary charge. These horses, I may state, had constantly suffered from glanders and farcy, and no doubt the march had something to do with the development of this single case.

9. At Korti, owing to the non-arrival of other Veterinary Officers, I was requested by the late Major-General Stewart to give up medicines for the various camel corps, and also to attend the camels. Having only taken a sufficiency of medicine for the use of the 19th Hussars, I at first objected to give up my medicines for camels until the General decided I must do so, and that he would take all responsibility for the horses afterwards being without. I subsequently was able to obtain an unit box from Captain Maxwell, who had very few camels, and handed it over to the officer commanding the Mounted Infantry, and also a tin of McDougal's sheep dip I had was handed over for use of the Guards Camels Corps. Veterinary Surgeon, 1st Class, C. Phillips, shortly afterwards arrived, bringing a quantity of unit boxes and other stores, and was able to supply Veterinary Surgeons Bennett and Beech, who had also arrived, and took over charge of the camels. Before passing, I wish to testify to the excellent qualities of McDougal's "dip," as a dressing for wounds. Made into a weak solution with water, it was applied to the severe galls on the camels, by means of cotton obtained in the district. When time was allowed, and attention paid to cleanliness, wounds commenced to rapidly heal; but owing to the necessity for working all the camels, this was almost impossible, as the majority of them had saddle injuries.

10. The regiment at Korti became divided into three divisions, one proceeding with the River Column, one across the Desert, and one remaining at Korti to become the escort of Lord Wolseley, when he should cross the desert. This division was not required for this duty, although twice held in readiness to proceed. I was left with this division. E. Troop was still at Wady Halfa, and various other stations. The squadron proceeding up the river because almost destitute of shoes and nails, only a few sets being procurable at Korti, and our stock being exhausted in sharing those remaining before the regiment was divided. The horses of this division consequently returned to Korti almost shoeless, and with many horses foot-sore. The constant marching to and fro, over rocky ground, will account for the excessive wear. Constant applications were made for further supplies of shoes, and on the march up the Officer Commanding had sent in an estimate for shoes and nails, etc., that would be required per month for the use of the regiment. Not, however, till March, 1885, could any be obtained, and then only sufficient to partially shoe the horses, so that they might march to the various summer quarters. The horses of the Desert Column returned very much debilitated, owing to the great privations they had undergone, and the very hard work they had performed. Many horses either died or had to be destroyed for debility on the return march. Several horses were also killed in the various engagements that took place.

11. After the retreat from Matammeh, the regiment was concentrated at Korti, a part of E Troop having joined from Wady Halfa. It was, again, however, divided, to take up summer quarters at the various stations along the Nile, the Headquarters and two troops proceeding to Dongola, where they were afterwards joined by the remainder of E Troop. This troop had been performing transport duty at various stations. Applications were again made for shoes and nails, this being a good opportunity to get the whole regiment thoroughly shod, in case they were required to suddenly march. But owing to the necessity of getting all the clothing for the men forwarded to the various stations before the Nile became at its lowest and preventing navigation, the transport of other stores was delayed. In April 100 sets of shoes were obtained, with a sufficiency of nails. I immediately ordered the two farriers to convert all the hind shoes into fore, and then equally divided the 200 pairs thus obtained of fore shoes between the various troops, that the worst cases of each might be shod up, at least, on the front feet.

12. Besides the regimental shoeing, farriers were required also to shoe staff horses, and a number of horses that were still in charge of the Egyptian Army. (At one time one shoeing-smith was detached for staff duty). This, of course, tended to lessen the supply of shoes available for the use of the regiment.

13. A few remounts were purchased from Officers at Dongola, Shabadood, and Korti. and a number of horses also were handed over from Lord Wolseley's Egyptian escort, and some that Major Grenfell had brought up to Korti on special duty. There were no suitable remounts to be obtained from native sources between Wady Halfa and Korti Camp. At Dongola there are a few horses, but the natives prefer to keep them. Horses at other places were small and badly shaped,

14. With reference to forage for the horses, the Commissariat, where possible, supplied barley or dhourra, and on the march, where it was thus obtainable, two or three days' rations were carried on camels. At some few places the Officer commanding was able to purchase barley, but in no great quantities. Dhourra, however, could be bought at most stations, depending on the amount of cultivated ground along the river banks. At some places not even a few stalks of the dhourra could be obtained without pressure on the natives, the supply being so scanty and all the growth being required for the native cattle. At some stations we were able to obtain either green or dried dhourra straw (wheat and barley), and green beans. At Matammeh the horses existed for some time on this green bean foliage alone. On the whole, it will be seen that no dependence can be placed on the local production. At Ajadeh, Argot Island, Dongola, Shabadood and Korti, the largest supplies were obtainable; also at a bend of the river beyond Kibar, some excellent barley was obtained.

15. The previous history of the horses should be taken into consideration, to account also for the debility occuring in the Desert Column, for it has been said that these horses were so exhausted that at one time they were useless. Most of them had been through the former Suakin Campaign, and many were even the remains of the Egyptian cavalry horses of the 1882 campaign.

16. There were a few mules attached to the regiment, and these animals seemed to stand the climate very well indeed. They were used for carrying the cooking pots and baggage necessary to march with the various detachments, the camel transport generally starting earlier and arriving rather later in camp.

17. With reference to camels, I was not constantly in charge of them, except those required for regimental transport. At various times I was asked for opinions concerning them, and at Korti and Dongola had various charges. There is no doubt that the strength of the camel was much over-rated and taxed. He was loaded and expected to carry much more weight than should have been the case. This was specially noticed after having seen the amounts carried between Wady Halfa and Korti, and comparing them with the loads and weight carried by the native friendly tribes between Korti and the Desert Wells. The estimate of weight by the soldiers seemed at times very vague, more often 600 or 700lb being loaded than 400lb. The saddle for the camel should, in my opinion, be very differently constructed; more attention should be paid to the natural conformation of the animal. The lumbar region was not "fitted" at all, the transverse processes of the verte-

bræ in an enormous number of animals becoming diseased or broken, and very large galls existing there, rendering the animals either useless, or resulting in septicæmia, or pyæmia, and death. Again, various sizes of saddles should be kept, so that a small camel should not be obliged to wear a large saddle, as was the case when the Light Division of the Camel Corps had to perform transport duty, where the part about the hips and sacral region became much damaged. The arch of the ribs was also a great seat for saddle galls, some being frightfully severe. Abscesses were constantly forming, and owing to their not being operated on, often became vast open wounds, the skin being completely destroyed; on removal of the saddle patches of the skin would be found adhering to the lining pads. The work of the campaign being so heavy all camels had to be used, though many were unfit to work owing to severe wounds and their general bad condition; the result being that many of them that died were found to have suffered from blood poisoning, with the accompanying fever—they marching on until they dropped and died.

The camel being an extremely nervous animal in temperament, often came in for abuse and brutal treatment from his various attendants; one case I saw of the jaw being fractured by a blow, the animal having to be destroyed as useless for further service.

The practice of tying one camel to the one before him on the march, and in his turn to the one behind, should be discountenanced, it leading to injuries to the tail and jaws, and oftentimes a willing or strong camel having to drag a tired or debilitated one. The tribesmen doing transport work with their own camels always allowed them to travel free. The necessity for keeping the camels tied on picket lines was, no doubt, to a great extent the cause of much of the skin disease that existed—the camel, for his general health, requiring to roam about and graze at will. The difference of management was easily noticeable among the camels of the friendly tribes, they being free from skin disease and galls, and in much better condition than the Government camels. Of course, these camels had not been subject to the long and trying march up the country the Government ones had. Again, with regard to watering; there seemed to exist an opinion that as the camel was required to go long distances and periods without water, he should be constantly practised in going without. This I consider a great fallacy: he should be allowed to drink whenever opportunities occur. If the camel is made to travel long distances without water, he has to suffer afterwards. He can certainly travel long periods without water, owing, in my opinion, entirely to the size of the rumen; but so can cattle, as was seen when the contractor of meat drove some bullocks from Korti to the Gakdul Wells, and beyond, without water. The camel, no doubt, like all other ruminants, requires plenty of water, and if he is kept without it he suffers sooner or later from the deprivation. I believe that, but for the difference in the arrangement of the foot, the bullock would travel as long as the camel, provided he was accustomed to travel without water.

Great patience should be exercised in watering camels; they will often not drink before the sun rises or after sunset, and many require a long time allowed them, being very shy.

The camel seems an animal very susceptible to paralysis, several cases of which I saw. Concerning the diseases that generally occurred, I leave their consideration to those Veterinary Officers who were constantly attending camels.

18. The animal chiefly depended upon by natives, besides the camel, is the donkey. Great numbers exist all through Upper Egypt, and the provinces as far as we went; he is active, strong, and able to carry a heavy load. I consider him a most useful animal, and he might, perhaps, have been utilised with benefit to a much greater extent during the recent operations up the Nile.

19. There is no doubt that the number of camels employed was far too small at the first, which was probably owing to the difficulty of feeding a larger number; but, providing that forage could have been obtained, I believe it would have been more economical to have purchased greater numbers.

Before proceeding up the Nile, being in charge of the veterinary medicines, I had to prepare the first portion of the veterinary unit boxes, some 60 odd in number, and also to prepare and pack the cases of carbolic oil; to perform this duty I had to obtain the services of the late Farrier-Major Short.

In cases of expeditions similar to that up the Nile, a more portable form of forge would be most useful; so that when a Cavalry regiment became so much divided, each division should be in possession of one, and so be independent.—I have, etc.,

S. M. SMITH, Veterinary Surgeon,
Army Veterinary Department.

London, 15th September, 1885.

LIVERPOOL UNIVERSITY VETERINARY MEDICAL SOCIETY.

A general meeting was held at the University on Friday, June 16. Present: Messrs. J. T. Share-Jones, President; W. Woods, Wigan; J. B. Wolstenholme, G. H. Locke, Manchester; Dr. Annett, D. C. Matheson, H. Sumner, F. Jones, W. Quiggin, and A. Richardson, Liverpool: Hewetson, Southport; Ball, Ormskirk, Ward, Little Sutton; Dobie, Birkenhead; and W. J. Fletcher, Wrexham.

Apologies for non-attendance were received from Sir Rubert Boyce, Messrs. S. Jackson, E. Faulkner, A. Taylor, J. Storrar, P. Carter, R. Hughes, and H. Holroyd.

The minutes of the previous meeting were read and confirmed.

Mr. FRANK WARBURTON, M.R.C.V.S., was nominated for membership: Proposed by Mr. F. Jones, seconded by A. Richardson.

The proposed rules for the reconstituted N.V.A. were considered and approved subject to amendmeut to Rule 2, Section 2, to read "for the discussion of subjects of veterinary interest," and Rule 8 to read following Agricultural Society—"or any ordinary member of any existing Veterinary Society." The object of this amendment being to permit members of the medical profession who are members of existing Veterinary Societies to become members of the N.V.A.

A letter from W. Watson Rutherford, M.P., was read expressing regret at at his unavoidable absence and advocating increased Government assistance for veterinary work.

PRESIDENTIAL ADDRESS.

JOHN T. SHARE-JONES, F.R.C.V.S., M.S.

In the first place I must offer my thanks for the honour you have conferred upon me in electing me President of this Society for the coming year. In accepting the office I think I may claim a fair acquaintance with the ups and downs of the working of a Society of this kind, for for some years it was my privilege to occupy the post of Secretary, and that is the office which above all reveals the many difficulties which have to be overcome to ensure what may be termed a successful year.

I presume the primary object of all our societies is to promote the welfare of the profession to which we

belong, and to increase our utility to that greater community of which we form a small part. Thus we discuss professional and topical subjects, and at times forward recommendations as the result of such discussions to those quarters where they might take effect. We are in effect a kind of guiding hand, and although we have no authoritative official status there is no doubt that our work produces, though slowly nevertheless surely, beneficial results, and this indicates the necessity for a careful sifting of all the material brought before us.

There are so many subjects which present themselves when considering the question of a presidential address that much difficulty is experienced in making a selection. However, I propose dealing briefly with the question of the veterinary surgeon and the public.

One of the greatest questions with which the profession will be confronted in the near future will be the modification and, if necessary, amplification of its Educational curriculum to meet the increased requirements which will be demanded in connection with the great question of Public Health. This subject is at present before the country in a light such as it has never been before. The public are being educated rapidly on its economic side, and the lay mind is easily grasping the fact that it is a matter which has the greatest bearing upon the nation's welfare.

The subject is no longer regarded from the point of view which is mainly dominated by sentiment, but is being seriously taken up by the hard-headed business men, who are appreciating its far-reaching effects upon our trade and commerce, and the immense drain upon the ratepayers of this country which our laxity in dealing with preventable disease entails. Education in this respect is progressing rapidly. The question is now placed alongside such great questions as national education, our Tariff system, and so on, on our political platform, which with its faults remains the greatest of our educative forces, for it reaches thousands of our people which no other educative influence affects. One has only to mention on a public platform the fact that one out of every three persons engaged in occupations who die between the ages of 15 and 65 is killed by tuberculosis, and draw attention to the number of applications which are made as a result to our Boards of Guardians for relief for the widows and orphans of the deceased out of public funds, and the audience will immediately see the economic value of eradicating this disease. We have in Wales an educative and preventive campaign against tuberculosis. It is our National Memorial to King Edward, and has been initiated and is carried on by voluntary effort. In this campaign it has been my privilege to speak on several occasions, and what struck me more than anything else was the ready manner in which the people appreciate the intimate relationship existing between the life of man and the lower animals—particularly the domesticated animals which man has selected to live around him. To the intercommunicability of disease between the various species including man, and the risk which man runs by infection from the lower animals the public are now becoming enlightened, and the time will shortly arrive when through their duly elected representatives the people will assuredly demand that comprehensive dealing with this question which other great national subjects receive.

This, then, is our opportunity to show our utility to the community. Preventive medicine is the medicine of the future. No longer are practitioners of human and veterinary medicine regarded in the light of men possessed of mysterious secrets, handed down from generation to generation in Latin prescriptions. Their skill in operative surgery, and ingenuity in preventing disease are what are now respected. We have our part to play, and this part is by no means the least important.

As a young and small profession, I fear we are not public-spirited enough. We seem to be waiting for some good Samaritan to offer the hand which will raise us and keep us in an exalted position amongst the learned professions—a hand which never seems to appear.

Like all other bodies of men, our first duty is to be of service to the community to which we belong. The administration of public affairs demands the voluntary services of men drawn, if possible, from every section. These men give their time and labour in the majority of cases cheerfully. To be placed on the Bench and to receive occasional invitations to public functions are but a very inadequate recompense, and the public man gets little direct return for the self denial which he is called upon to make. Ample repayment comes, however, in an indirect manner, which few seem to appreciate. The presence of a member on a public administrative body calls attention to the profession or business to which he belongs—it is a kind of natural advertisement, and if he should display ability, then not only is he appreciated at his true value as a man, but that appreciation is extended to the section to which he belongs. How useful it is to have a member of such a profession or line of business on our Board or Council? is a phrase of every day use. The adaptability of the various members to the different branches of work is plainly in evidence when the members of Committees are being elected, and just as the surveyor, builder, or engineer finds a seat on the Building Bye-laws or Highways Committee, and the educationalist on the Education Committee, and so on, so do the practitioners of human and veterinary medicine naturally gravitate to the Health Committee. Then the opinion of those whose work is most closely allied to the matter in hand receives deference, and, speaking generally, the affairs are administered by the Board and Councils as a whole in accordance with the opinions expressed and advice given in Committee by those who may possess expert and technical knowledge.

It would be well for us as a profession to ask ourselves the question, Do we do our duty by our fellow men in this respect? I am afraid there would only be one answer, for I know of no profession or line of business which is so poorly represented as we are. There are gentlemen of my acquaintance who would ornament a seat on any public body. The public suffer through their withholding their services, and the profession loses one of the most potent factors which elevate any profession in the public eye, for the public are kept in a state of ignorance as to the real value of our work.

To me the peculiar appointments frequently made, and extraordinary actions often taken when matters appertaining to our work are concerned, are in no way surprising. The steps are taken in the dark, and there is a lack of guidance from a source which the people have every right to expect. The highest degree of efficiency in administration is only attained when our public bodies are representative, as far as possible, of every section of the community. To take our fair share in the burden of public administrative work appeals to me as the most legitimate and generally accepted method of enlisting public sympathy towards our own work.

The great branch of public health work, which we claim to represent, will certainly be dealt with. The rapid popular spread of the great science of economics will demand it, if all else fails. Whether it will be allocated to us as a right or not rests in a great measure with ourselves and the part which we are prepared to play in the game of life generally. It will not be for us, any more than it will be for the medical men, sanitary inspectors, butchers, or farmers to say into whose hands the various branches of the work shall be committed.

That is a right possessed by the people themselves, and they will exercise it through their own representatives.

Then our further duty lies in rendering ourselves highly efficient in order that the public may get a just return for the funds which they will be called upon to subscribe. If we are called upon we must give them of our best. To attain this object there should be complete sympathy and co-operation between the educational centres and those engaged therein and their brethren in practice. The ploughman in the field is as essential to the welfare of the farm as the cowman in the yard. Practitioners have opportunities for guaging public opinion and estimating public requirements which render their advice and help to those engaged in the schools invaluable. On the other hand, the schools with their museums, laboratories, dissecting rooms, and so on, I think I can say with fairness are centres to which the practitioner can look for assistance in unravelling those knotty problems with which he is so frequently confronted. Our interests are practically one, our object the same—the uplifting of our profession, and the enhancement of the utility of our work. If we advance we do so as a whole and bound together by reciprocal sympathy and support.

We need go no further than the institution in which we are now meeting to see how this mutual help and support pervades other branches. Take the broadest case. To the children of Liverpool citizens who have been overtaken by misfortune this University makes grants to assist them to enter one or other of the professions. On the other hand, the citizens of Liverpool make an annual grant to the University out of its public funds. A reference to the University Calendar will show that most of the professions which are here represented have linked themselves to the institution, in that they have instituted scholarships, both undergraduate and post-graduate, have assisted in the foundation of chairs, etc., with the result that they have secured a permanent association with the University, and have acquired the right to assist in indicating the lines upon which the work shall be carried on and degrees granted. Moreover, through their graduates, each of these professions becomes part and parcel of the University, and the solid foundation upon which their relationship is based will maintain this in perpetuity.

What is our position? The history of University veterinary education in America reads like a drama. Years ago the few with most advanced views saw the advantages of being associated with the Universities. Schools were attached to them in a kind of semi-detached fashion. But they were built on the sands, and one after another fell from financial starvation. Then came a great revival. The profession recognised the fact that it was part of a great community, and that it was a contributor to the public funds. The veterinarians saw that, as a section of the people, they had a duty to perform to themselves and that was to secure the benefits and advantages which were conferred upon other branches of learning through the medium of the Universities—the channels through which public funds for the purpose of higher education were disbursed. What is the result? Through enthusiastic and complete co-operation they have become an integral part of the University, for there is scarcely a University of repute in America which is without a properly endowed veterinary school, and which does not grant veterinary degrees admitting veterinary students as members of the University. Their foundation is now upon the rock, and the manner in which the work done in the schools is linked up (associated with) to the commercial pursuits of the nation in the foundation of the numerous bureaux of animal industry and experimental stations is ample testimony to the great national asset which they have now become.

Australia has followed suit. The University of Melbourne has its State-aided veterinary school, and grants veterinary degrees. But what of Britain? Well, it is always said that she moves slowly. She has certainly moved with deliberation in our case. But as I said at the outset, it is my firm conviction we have ourselves to reproach in great measure.

I don't know, but it seems to me that there is a double basis for granting a degree and conferring University benefits and recognition on a profession, one is the amount of genuine enthusiasm and public spirit displayed by that profession towards such a project. The other is the field for research work in problems, the solution of which would benefit man, which the work of the profession can offer. Well, as to the first point, we can do much. If money is required we should be prepared to contribute our share as we can afford. We want more Dicks and McCallums to stimulate support from others outside the profession.

As to the second point I have no doubt. Whilst the advocates of the richly endowed pure science who disdain applied knowledge, are searching about, frequently in vain, for problems to solve, whilst they are attempting to gather a harvest from a soil which has been tilled and tilled until in many cases it is now almost barren, we have a whole territory of practically virgin soil to offer. Start a research worker in any of our subjects and he will be positively amazed at the amount of work to be done. His difficulty will be not to find a problem but which problem to deal with first. Here is a soil the tilling of which will bring forth a fruitful harvest—a harvest the garnering of which mankind awaits.

Yes, on this second point our claim is good for we have an area for research to offer which for the possibilities of fruitful results is second to none. Yet there is not a worker in this field in any veterinary school in this country whose post is properly endowed for the purposes of research. At present, so far as research work is concerned, we are like labourers endeavouring to harvest a field of hay in their by dodging the showers in the evenings. Results cannot be expected unless our workers have an equal chance with those in other branches.

London University grants a degree in Science. Our Edinburgh *confrères* are moving to get a Veterinary Degree. From the bottom of my heart I hope they will succeed. Whether the University of Liverpool will grant one rests to a great extent upon the members of our profession in Lancashire (yes, the first day I came to Liverpool a member of our profession speaking with pride, said that when Lancashire set her hands to the plough she never looked back), the men of Yorkshire, Cheshire, and Wales.

The securing of University degrees by all our Veterinary Schools will bring with it power. It will attract labourers into our field of research, and will secure for our profession an adequate share of those public funds for educational and research work which are at present being diverted into other channels. It will raise the value of the professional stock in this country, and we shall become a much greater national asset. Our repayment for any effort we put forth will be tenfold. If they are only granted to holders of the Diploma of the R.C.V.S., then will the one portal system and the power of our own governing body be maintained.

Let us for a moment examine superficially our present curriculum and see how far it meets the demands which are now, and those that will in the near future, I hope, be made upon us.

Taking all the subjects, from the preliminary examination to the final, they may be placed into two categories, namely, those which are studied with the object of developing the mental faculties, and those which have a direct and particular application to the work which our license entitles us to practice. Now

we are drifting daily away from the æsthetic aspect of knowledge and more towards its utilitarian side. This is so in our system of elementary education as is evident in the introduction into the curriculum of such subjects as domestic economy, woodwork, cookery, etc., subjects which not only develop the faculties of perception, but have a direct application to matters of after, everyday life.

With regard to the first category, the preliminary subjects, since we demand a knowledge of these as an indication of mental training and capacity—an indication that the mind has received that preparation which renders it suitable for the reception of the particular knowledge which is to follow—then it necessarily follows that there should be some uniformity in the standard demanded. Judging from the predilection which students have for certain qualifying examinations, it strikes me that there is room for much improvement here, and that the standard set up by the various examining bodies whose certificates we accept is not an equitable one.

The subjects in the second category are presumably taken during the four years intramural course. Considering the immense ground to be covered this period is very short, and the time may soon arrive when an extension will be necessary if our men are to be adequately equipped for public service. At the same time there is much work done, particularly in the first year, which, strictly speaking, belongs to preliminary study, and the applied portions of which are recapitulated later. When the eyes of most men are focussed upon the three score and ten years which they have to run, it is time to avoid anything in the nature of unnecessary overlapping. Utility should be our watchword, and application our instrument. The amount of information conveyed during our course is most extensive. But it seems to me to be somewhat heterogenous, and that we do not make the most of the subjects—we do not direct sufficient attention towards welding the information into a complete whole. Some years ago I called attention in a paper read at Rhyl to a lack of connection between anatomy and surgery, and advocated the institution of a course in surgical anatomy to link up thought and show the logical connection between the subjects. In two of our schools, to my knowledge, I am glad to say such a course is now given.

Time will not permit me to go over the whole course. My esteemed predecessor showed last year how the veterinary surgeon could enhance his value to his clients by the application of dietetics; but there is one branch of work in which I have no hesitation in stating that our training is wholly inadequate, I refer to the inspection of meat. I speak primarily as a veterinary surgeon, but one has an intimate knowledge of farming and butchering. The veterinary surgeon is the man to do this work. In his course are the subjects which can be applied to it with the greatest advantage. But unfortunately they are not applied. We lay a glorious foundation and upon it erect a superstructure of wood without even pinning it down. It is a structure which does not appeal to the architectural critics who cannot see the foundation. Meat inspection is not a subject for a single short course. Let us build an edifice in conformity with the foundation by giving a number of short courses, specially applying the subjects which form the foundation to the actual practice of the work-applied clinical instruction, applied pathology and bacteriology, applied anatomy, and so on. We should deal similarly with our whole curriculum, then we shall be giving that comprehensive interpretation to the subjects which their great importance indicates will be required of those who will take charge of the work in this what has been termed "The Dawn of the Health Age."

Mr. J. B. WOLSTENHOLME in rising to move a very hearty vote of thanks to the President for his address, said: As we get older we were inclined to view things from different standpoints. Regarding the suggestions made by the President respecting modification of our present curriculum, he felt much depended upon what the members of the profession and what the nation proposes a veterinary surgeon shall be. If we were to be worthy of the name of a profession and take our stand side by side with the sister profession we must make such progress as to entitle us to this claim. Any such progress would of necessity involve lengthening the curriculum to five years. This may seem a somewhat alarming suggestion in face of a general decline in the number of students entering our schools and the rapid substitution of mechanical haulage for horse traction. But thunderbolts always came in summer time! At the present moment the medical profession is seething with unrest through the action of one of our Statesmen. The position of the medical practitioner has to be faced from different points of view, but ultimately the nation will determine the nature of the position he shall occupy. We are all children in the great national family, and there is a growing tendency on the part of the State to assume its paternal responsibility for our general well being. There seems reason to anticipate that the future of the medical profession will consist largely of service such as that of policing, and fighting fire. Preventive medicine and applied hygiene are becoming increasingly important.

If the members of our great national family render that service in the right spirit, and not in that of German officialdom, we have nothing to fear, and as there is such as close association between animal and human diseases, and the general work of the veterinary surgeon and public health we, as a profession, must ultimately take our place side by side with our medical brethren. This being so our prospects are most hopeful.

Naturally the question arises as to how far the nation can institute service for all our members. This, fortunately, is receiving the attention of official bodies throughout the country. What we want is not less but more officialdom in veterinary matters. There must be a general increase in the appointment of whole-time officials and a general system of decentralisation in the administration of Animal Diseases Acts.

He welcomed the President's reference to the inadequacy of the financial facilities offered to our profession for research work. No department of science offers such a wide field for interesting and profitable research. There was every reason to believe that work in this direction would assist largely in the solution of many pathological problems. This class of work is becoming increasingly necessary. He instanced the research in matters relating to pigmentation, melanotic tumours, in relation of loss of colour of hair, how fats are taken up from the alimentary canal and distributed, etc. It was not for lack of brains—of efficiency—that these problems were not solved, but for lack of opportunities of research. An ordinary practitioner cannot possibly do much research work, and up to the present neither State or public aid had been forthcoming for these purposes.

Mr. W. WOODS seconded the vote of thanks. In doing so he wished to associate himself with the ideas expressed by the mover. He felt that the President had introduced matters of vital importance to the profession, and was glad to think through the veterinary press they would be brought before the profession as a whole. He regretted that the occasion did not seem the most suitable to enter into a further consideration of the address, and expressed the hope that at some future time the suggestions made would receive the careful examination their importance demanded.

On putting the motion to the meeting it was carried unanimously with acclamation.

The PRESIDENT briefly replied, thanking the meeting for their expression of thanks, and said he would welcome a further discussion on his address should the Society so determine.

ANNUAL DINNER.

The dinner was held at the University Club in the evening. Mr. Jno. T. Share-Jones, the president, occupied the chair, the principal guest being Mr. E. T. John, M.P. Others present were Professors Annett and Buchanan, Dr. Mussen, Messrs. Bull, Ormskirk; Marsden, Fletcher, Wrexham; Woods, Wigan; Sumner, Shepherd, Frank Jones, Arnold Richardson, Liverpool; Hewetson, Southport; Wolstenholme, Manchester, etc.

Mr. BRITTLEBANK (President of the Lancashire Veterinary Medical Association), in proposing "The Medical Profession," said he had often been asked to come to the Liverpool Veterinary Medical Society, and if he had not done so now the Lancashire Association would have felt that he was breaking a promise he had given that he would visit them when an opportunity presented itself. As to the medical profession, it was one that he had worked very closely with for a good many years, and he had seen a great deal of the difficulties which attended its work, particularly on the preventive medicine side. He could not help thinking as he came along from Manchester of the enormous work which had been done in this city by the Preventive Medicine Section of the University. He referred to the Tropical School. Huge tracts of country had been opened up to commerce with comparative safety as compared with the condition of affairs not so many years ago. There were many gentlemen in that city to whom we owed a great debt of gratitude, and he was quite sure as the years went by the world would realise what these gentlemen had done not alone for the public health but also for commerce, because there was, after all, a very great commercial side to this question of public health. Each life was worth a definite sum of money to the nation, and each life saved was a distinct asset, but the medical profession were a national asset, and no doubt a very prominent national asset. At present there was a considerable agitation going on, and they sincerely wished them a happy issue out of their afflictions. (Hear, hear.) Speaking for the veterinary profession, a great many of them regarded themselves as a sort of younger branch of the general profession of medicine. Their aims were the same—the alleviation of suffering—and they looked forward with pleasure to the aid which they might expect from the medical profession as the years went by. (Hear, hear.)

Professor ANNETT, in replying, referred to the serious illness of Sir Rubert Boyce, to whom, he said, they owed almost entirely the existence of their Society. Why he should have been asked to respond to that toast he did not know, for the whole length of his career as a medical practitioner stretched over a vast period of two weeks. (Laughter.) For two weeks he was a medical practitioner—for the rest he would not say he was a veterinary surgeon but a veterinarian. Almost immediately after he obtained his licence to work he had the good fortune to be presented with a travelling 1851 scholarship, and after that he passed some six months study with Sir John M'Fadyean in the London Veterinary School, and from thence he travelled on the Continent. He went to Berlin, and there was associated with Professor Schütz, professor of pathology in the veterinary school, and with Professor Koch, of the same institution in Berlin, an institution whose members studied both the human and veterinary science, in fact the study of those two sciences should not be separated. Medical science could hardly exist without veterinarians. It had been his pleasure, almost his ambition, throughout the 15 years in which he had been more or less associated with veterinary matters in this city, to foster as much as possible a good feeling between the two professions. (Hear, hear.) He looked upon himself as a sort of intermediary between the two. He had hoped that the progress in that direction would have been greater, and he would like to offer every assistance to members of the veterinary profession in joining with the members of the sister profession in cultivating as far as possible what one should call the science of medicine rather than the medical science—that science which underlies both professions, and by means of which they should bring about benefits to mankind, benefits to the country, the city, and themselves. (Applause.)

Dr. MUSSEN proposed the toast of "The Veterinary Profession." He remarked that ever since the veterinary school was established seven or eight years ago he had had the privilege of being one of its staff. Mr. Brittlebank had alluded to the help which the two professions gave each other. He cordially endorsed that. In the department over which the Medical Officer of Health presided they had had nothing but the greatest help and assistance in anything which had been proposed with a Public Health object. He thought the classes relating to tuberculosis had been a success, to a large extent, owing to the way in which the veterinary profession had assisted them. The medical profession and the veterinary profession had a great deal in common. It was a great pleasure to be connected with the profession, it was so progressive. A young profession was always interesting, it had got possibilities in front of it. The medical profession was hoping to go ahead, too, but he thought their profession was to a large extent dependent on how they were helped by the veterinary profession. (Hear, hear.)

Mr. HENRY SUMNER, replying, paid a tribute to the work accomplished by Sir Rubert Boyce as being the means of improving the education and thereby the status of the veterinary surgeon, that their members should be put on equal lines with the other learned professions. Their profession was a young one, it was a small one, and it was going through a most critical period of its life. The governing body had ceased to have sufficient funds to carry out its duties in a proper and efficient manner. Those funds hitherto had been gained by the profits of its examinations. Now, through various agencies, the students of their schools were diminishing, through the increase of knowledge and the necessity for a wider field of examinations, the cost of examinations was increasing, and instead of a profit from examinations the governing body sometimes made a loss. The funds of the College were insufficient, only quite a nominal sum. The assured income was about £140 or £150, consequently it had been necessary for them to apply to Parliament for powers to charge an annual registration fee. Hitherto they had been a free profession—after they had gained their license to practice there had been no further call for any subscription. He believed that that very night the Veterinary Surgeons' Amendment Bill was before the House of Commons, and if the opposition was such that it was rejected the position of the Royal College would be one of acuteness—one of great seriousness. He said that feelingly, because they as a profession had prided themselves that they had one importantsystem—they had one license which had been obtained through a good deal of stress and storm and very many difficulties. Now it was apparent that if they did not get this increase of funds the time had come when they could no longer claim the right, and the sole right, to license veterinary surgeons within these realms. That, unfortunately, was a matter upon which the profession was not absolutely unanimous. There was a small number who still resisted the change, and who still objected to giving power for charging for registration. Considering the lot of the veteri-

nary practitioner it would, he said, perhaps undergo a very considerable amount of change. The time had come when they should not be merely repairers of the lower animals, but when the public would expect them, as experts in animal diseases, to be able to advise local public bodies both in the administration of the local Acts pertaining to animal diseases, but also to be at the right hand of the medical officer of health to say which was and which was not flesh that was fit for human consumption. That was one branch; another was the administrative one. They knew that the Animals Diseases Acts were administered from one central authority, the Veterinary Department of the Board of Agriculture, and they were administered, probably many of them thought, by a considerable shortage of qualified veterinary surgeons. He thought the probability was that within a few years the profession would be called upon to take up many of those administrative duties which were now given to gentlemen who were not educated as veterinary surgeons although they might be estimable gentlemen in the way of enforcing bye-laws and regulations. Another point considered at their county meeting at Manchester was as to whether the time had not come for passing a resolution approving of the decentralisation of the veterinary work, and if it had arrived that the County Councils should be the administrative bodies, and that they should employ a considerable number of veterinary surgeons as whole-time servants. These were things which showed that their vocation was changing, which showed the examining body in London that it was necessary the curriculum should be brought up-to-date, and that their new men should be fitted to hold any of the posts which in the future would come within their reach. Sir Rubert Boyce upon a memorable occasion once said "It is for you to capture the posts—the administrative posts." He (Mr. Sumner) said it was for them to be fitted to hold the posts when they captured them. (Hear, hear). As to the fitness of the veterinary surgeon for public offices they looked with pleasure upon the success which had attended the veterinary department of the Corporation of Liverpool; they had done some fine work in Manchester, so they had not failed to show the public that they were fitted for those position which in the future might come their way.

Now there was a question as what the schools were doing. The examining body was right in demanding a high standard of knowledge for the candidates who came up for their respective examinations. What were the schools doing? And what had been the influence of the coming of veterinary teaching into that University upon the teaching of other schools in Great Britain and Ireland? He thought he could say without fear of contradiction that the very fact of veterinary education becoming part and parcel of the work of the Liverpool University had had a most salutary influence upon our schools, which up to that time looked upon that effort with a not altogether friendly eye. The schools, like the parent body, wanted money, but from what source was money likely to be obtained? What was their claim upon the Government for beneficial treatment? What was their claim upon the Government that they should receive a share of that money that was expended both by the Board of Agriculture and the Board of Education? He thought they could claim that they were a necessity for the well-being of the masses—a necessity in the interests of Public Health. He thought they could claim that they were absolutely necessary to be the hand-maiden of Agriculture, so he considered they had a claim both on the Board of Agriculture and the Board of Education for some help to go on, and if possible increase the efficiency of the different schools. The Royal Veterinary College got the handsome sum of £800 a year from the Board of Agriculture. Why, then, should not they get £400 or £500, or a sum in accordance with the number of students for the advantages which they afford. (Hear, hear).

Mr. W. Woods also responded. He said it was in 1792 that the first veterinary school was established in this country, and then a Frenchman had to be sent for to teach veterinary science here. That school owed its existence to four medical men, so that they not only owed their individual existence but their professional existence to medical men. At first the education was probably very poor, but now they could say with a certain amount of pride that the general education of a veterinary surgeon did not leave a very great deal to be wished for, seeing that they accepted no certificate but what would qualify a student for the medical profession. And they could not accept anything less, for the day had gone by for a veterinary surgeon to be an uneducated man. No one degree was higher than another so far as the licence to practice was concerned. It was not always so. He thought the unanimous feeling of the profession was that the one portal system should never be abolished until there came about a State veterinary examination. He would like to see a State examination for the medical as well as the veterinary profession; he believed it would be an advantage to the medical profession. The veterinary profession had been made use of to a certain extent by the Government in the suppression of contagious diseases, and he felt they had a great future before them in that direction. At the present time the administration of the Acts for the suppression of contagious diseases and the thinking out of the laws all came from London. It was quite easy to think that different parts of the country would require different treatment. Let them take the case of swine fever, which was on the increase, and which the Board of Agriculture had done a great deal to try to suppress, and which they were suppressing in some parts and were not in others. If that work were decentralised, if there were organised veterinary sanitary administrations of different parts of the country with Veterinary Officers of Health of counties, and if those counties were allowed to deal with contagious diseases within their own areas they would recognise some reasons why the Board was not suppressing and not stamping out contagious disease, and they would be able from their knowledge of the local conditions to enact laws subject to the Central Board in London, which would be more effective in stamping out swine fever and anthrax, which was on the increase. The cause of anthrax was probably different in different parts of the country. In some it might be imported in hides, while in others where they knew it was increasing and where there were no tanneries, it was probably imported through manures.

Mr. J. T. Share-Jones (the President) submitted the toast of "Our Guests." He said:—

The year 1911 would, he thought, come to be regarded as the beginning of a new era in the history of our country. We prided ourselves as being a great nation, and as such we had many valuable assets, such as our land, Navy, minerals etc., but of all, the most valuable asset of this or any nation was not its ships, nor its land, nor its minerals, but the life of its people. Men could estimate the value of most things, but no one could estimate the value of the life of a single babe. And now in 1911, for the first time in English history, the preservation of that which was most precious to our country was made the outstanding feature in our national budget. He thought he should be excused any party feeling towards this matter, and he thought further that he would be expressing the sentiments of all present when he said that they rejoiced in the fact that at last the health of the people was taking its proper place amongst the great national questions of the day. (Applause.)

Preventable disease was ravaging this country to such

an extent that economists told us the loss to the nation estimated on the basis of manual labour alone amounted to many millions of pounds. The loss of mental work could not be estimated. One disease alone—tuberculosis—was sweeping off thousands of our fellow countrymen and children every year. By it every one in three persons engaged in occupations who died between the ages of 15 and 65 was killed. They had only to attend a meeting of the local Board of Guardians to be struck by the number of applications for relief from the public funds on behalf of widows and orphans of men who had been swept away in the prime of life. Apart from the number which it killed, this disease was reducing thousands yearly from a state of comparative affluence to one of absolute dependency upon the ratepayers. Yet it could be prevented. It would naturally be asked how, and what would the veterinary surgeon do to bring this about.

Well, he read a headline in one of the local papers a week or so ago which at first gave him a bit of a fright, it was "The passing of the horse—Is the veterinary surgeon vanishing." On reading the article he found that there was no immediate cause for them to be alarmed, since it was argued that the horse was a desirable animal to keep, notwithstanding the advent of motor traction. He feared that this interpretation of the work of the veterinary surgeon as simply a doctor of horses was too common, and at once he might say that, important as this work might appear, it was certainly one of the least important of the branches of work committed to the charge of those whose duty it was to study disease as it manifested itself in the domesticated animals. It was now generally conceded by those who took an interest in the subject that the medicine which was of greatest benefit to mankind was preventive rather than curative, and there was little doubt but that during the aptly-termed health age, at the dawn of which they now stand, the efforts of practitioners would be directed on those lines.

Take for instance, again, tuberculosis. It was estimated that 30 per cent. of all adult human beings and cattle were affected by this disease in one form or another. Horses, dogs, pigs, fowl were also affected, but fortunately in lower percentage. The disease was intercommunicable and its existence in the domesticated animals are therefore a source of danger to man. Particularly was this so in regard to cattle, for man was dependent upon this species for two of his most staple food materials—meat and milk. A vigoroue onslaught was about to be made on this grave disease. For this onslaught to be successful it was evident that attention must be directed to the disease not only in man but also in the domesticated animals and particularly the cow. This comprehensive view of a disease had been taken in the past with successful results. Rabies, for instance, had been driven out of our country by dealing with the human and canine species.

Now, who was to do this particular branch of preventive work. With all due respect to their estimable colleagues the engineers, into whose profession pessimists sometimes told them to transfer themselves, he did not think the public would feel quite safe in committing the vast branch of comparative medicine to which he alluded to their charge. No, so far from stating that their work was diminishing, it was his conviction that the real work of the V.S. was only now commencing, and that the public was just beginning to appreciate its value to man. (Hear, hear). Then reference had been made that the number of of veterinary practitioners was decreasing. That was so. Yet, whilst other branches of science were crowded with research workers amply supported, there was a vast territory of virgin soil, with great problems awaiting solution for the benefit of mankind—a territory in which the workers were altogether too few, and they could not be expected to produce results on the meagre support which they received.

There were some who appreciated the importance of this question. There were some who recognised the economic problem which inevitably arose if the members in a profession were allowed to decrease at a time when the public demands on that profession were increasing. They were pleased to welcome them there that night. They were pleased that night, as they were always pleased, to receive the sympathy and support of members of their sister profession. Above all, they were pleased that amongst the guests who had honoured themwith their presence, was a Member of Parliament who made agricultural research in this country the main point in his maiden speech in the House of Commons, which was a speech in which a man had much at stake. He would ask them to rise and drink with him the health of their guests, and with this toast it was his great privilege to associate the name of Mr. E. T. John, M.P., a gentleman whose breadth of conception has made his name a household word in the great industrial centres of the North of England. (Applause).

Mr. JOHN, in acknowledging the toast, remarked that there was no very good reason why he would be there that night except that he had pleasure to count amongst his constituents their distinguished chairman. He thought it was to that happy fortune that he was present, and not to any knowledge of or connection that he had in any way with agriculture. However, there was this appropriateness in his being there that he did, in connection with the business with which he had been identified from his boyhood, appreciate very highly the value of technical knowledge and skill. Within the last few weeks a very capable, well informed publicist had complained of the lack of expansion of the iron and steel trade in connection with Great Britain. Some eminent and distinguished colleague of his (Mr. John's) in the business had replied that the lack of expansion was inevitable, owing really to insuperable natural difficulties. He was bound to confess there was a great deal of substance in the contention, but his own judgment was that the lack of expansion which had existed for 10 or 15 years was very largely owing to the necessity for technical education and technical knowledge and equipment, and in the second place to an exaggerated individualism, unwillingness and unreadiness, on the part of very capable men who conduct any great industry to pool their common knowledge and experience. It was a very admirable defect in many ways, and was to be found just as prominently in the conduct of a great industry like iron and steel trade as in the humbler one of tenant farming. Men naturally thought of the iron and steel trade as one of first importance, but what had impressed him very greatly was the enormous magnitude of the agricultural interests of this country—and if they would by the side of it that which was represented and cared for by their profession. Quite recently he came across a statement that the sheep breeding industry in Great Britain actually represented no less than 40 million pounds—a staggering figure, and he saw that the entire live stock of the country probably amounted in value to 180 million pounds. In fact, some years ago he noted, it was valued at 251 million pounds. Those enormous figures justified their profession taking a higher status than it at present occupied in the public mind. The meat, dead and alive, which came into the country amounted in value to close upon 40 millions of money. In addition to the financial importance of the subject, one had to recognise the responsibility to exaggerate the importance of the purity of our food and milk and the necessity of sound meat. In addition, there was always connected with agriculture the fact that the population which gained its daily bread by agricultural operations existed under conditions that were peculiarly favourable

to physical and, he believed, moral and spiritual growth. There could be little question that the conditions which surround rural life were more favourable to the development of mankind in every sense than the much less desirable conditions which exist in our great towns. He had been pressing, as had been referred to by the chairman, to the necessity for greater grants—or greater financial assistance—to the development of agriculture. He occupied a position a little different to that of traditional Liberalism, though he did not say that it was different to that position occupied by a great number of Liberals to-day. The traditional position was that it was desirable and proper to leave trade to take care of itself—a policy of non-interference, of letting well alone He recognised on the other hand there were a great many things which a State could properly do for commerce, and which were absolutely impracticable to private individual enterprise. (Applause.) In Liverpool they were advocating and carrying forward successfully, he understood, the development of this principle in stimulating the production of cotton within the limits of the Empire. That did not directly affect the iron works of the North or agriculture, but he did not grudge in any way whatever contributions the country made to such an admirable project, and in the same way he approved heartily of whatever revenue and assistance the Government extended to the development of agriculture. The broad principle he took in the matter was that wherever the effect of Parliamentary interference was to stimulate production and cheapen the cost he was with them. He was afraid that where the effect was the reverse he was just as strenuously opposed to them.

What was the position, then, of Great Britain in this matter of assisting materially the development of agriculture? He found that the contributions of Great Britain were ludicrously inadequate, compared with many other European countries. The example of Germany was frequently quoted in all sorts of connections. Germany spent on the development of Agriculture no less a sum than £2,710,000, or £20 per 1,000 acres, Little Denmark spent £283,000 which was £40 per 1,000 acres; but Great Britain only spent £183,000 which was a fifteenth part of what Germany spent, and was only 47/- per 1,000 acres. The case for a more liberal treatment of agriculture had been clearly established. In addition to the financial conditions there were the very vital considerations of health. Of the question of the interrelationship and inter-communicability of disease from animals to human beings it was impossible to exaggerate the importance. He supposed the prevalence of Tuberculosis amongst animals had a close relationship to the wider-spread existence of the ailment amongst the people. He rather gathered that the veterinary profession had during the last 10 or 15 years, or perhaps less, been conspicuously successful in dealing with animal diseases. Lord Carrington the other day said that the Board of Agriculture had succeeded in stamping out almost all the serious diseases of animals. Under those conditions, their occupation, like that of Othello, would soon be gone. (Laughter.) When they remembered the multiplicity and complexity of the ills to which bovine flesh appeared to be heir to they might very well take courage, and look forward with confidence to the future, in which there would be scope for their energies and abilities. Apparently a good deal of success was attending the efforts of the Board of Agriculture and their profession. He saw that the cases of anthrax, glanders and scab now numbered 1,062, in 1910 they were 1,592, in 1909 2,313, and in 1908 2514. So that today there were only 40 per cent. of what they were in 1908. On the other hand he found that they were not so fortunate in dealing with swine fever. The Board of Agriculture and the profession generally had been contending this conflict for a matter of 18 years without achieving much success. He believed that this present year it was almost double what it was last year. In this connection he was pleased to notice that in a reassuring article upon tuberculosis in cattle, it was authoritatively stated that calves were practically free from tuberculosis. That was result which the profession had obtained, and it was very reassuring to humanity. The line he had taken mainly in this matter was to have regard to the interests of agriculture generally. He had been very anxious that everything possible should be done to increase the productivity of the land and to recognise very fully the magnitude of their part in this great industry.

He was sure they would approve of the important step taken by the United States. They were going to spend £137,000 on the inspection and guaranteeing of animals, £52,000 on the eradication of one disease of cattle alone, £16,400 on investigations in connection with animal diseases, £10,400 on co-operative experiments in breeding and feeding, and £9,900 on animal husbandry. One felt it difficult to ascertain from the Board of Agriculture exactly what they spent on research work. He had seen it stated at the very modest figure of some £600 to £900, and he thought the smaller figure was the later one.

He had had some little adventure with the Board of Agriculture himself. (Laughter.) He got some of the information he wanted, but they were unable to tell him what had been spent in America—he supposed because America was too great and too remote—they were unable to tell him what was spent upon Wales, because Wales he supposed was too small and too near. (Laughter.) However he was not singular in his inability to extract information from the Board of Agriculture. Mr. Bridgeman, on Tuesday night asked this very illuminating question, How much was spent last year out of the exchequer upon agriculture, and what proportion out of the amount was spent on salaries and officials in research and on development respectively, and how much was credited to small holdings, and the total amount spent by the State on agriculture in France, Germany, and Denmark? Mr. Lloyd George replied: I fear it would hardly be possible to determine accurately amongst many categories in national expenditure connected more or less directly with agriculture what items can be classed specifically as expenditure on agriculture. (Laughter.) That condition of things was most intolerable. That was to a very great degree characteristic of the department, they not only had a difficulty in extracting money from, but also an equal difficulty in extracting reliable and accurate information. In concluding, Mr. John said he was very glad to hear in regard to their school that they had a practical examination, and he had no doubt that this centre of Veterinary Science would accomplish very admirable work. He was quite satisfied that if Government could be induced to place greater resources at their disposal very excellent results would be achieved. (Applause.)

THE YORKSHIRE VETERINARY MEDICAL SOCIETY.

The Spring meeting was held at the Hotel Metropole, Leeds, on Friday, April 28th. The President, Mr. J. W. Lazenby, Tadcaster, presided, and amongst those present were Messrs. A. W. Mason, Samuel Wharam, Geo. C. Barber, William Crawford, H. G. Bowes, Leeds; G. E. Sampson, A. W. Noel Pillers, Sheffield; F. W. Pawlett, York; F. Hallilay, Dewsbury; M. Robinson, Barnsley; P. Deighton, Selby; Arthur Ellison, Harrogate; A. McCarmick, Hon. Treas., and J. Clarkson, Hon. Sec.

The minutes of the previous meeting, as published in *The Record*, were adopted, on the proposition of Mr. Pillers, seconded by Mr. Wharam.

Apologies for non-attendance had been received from Mr. J. A. Dixon and Mr. Schofield.

The question of subscribing to the Royal Sanitary Institute was raised. Mr. BOWES pointed out that if they intended sending a delegate to the forthcoming Congress it would be a matter of considerable expense, and the question to be considered was whether it was worth the expenditure.

Mr. WHARAM favoured the withholding of the Subscription. It was simply throwing money away, to pay it.

Mr. MASON proposed that the matter be left to the President and the Secretary to use their discretion as to joining or not.

Mr. BOWES seconded the resolution, which was carried.

The SECRETARY alluded to correspondence received in reference to the amalgamation of the Yorkshire Society with the Lancashire and Eastern Counties Societies, in regard to the coming election of the Council of the Royal College of Veterinary Surgeons. Prof. Williams had suggested they should communicate with the North Wales Society and invite them to come into the amalgamation. The North Wales Society seemed to be inclined to join with them, but were enquiring what the cost would be. The Yorkshire Society appointed a deputation to visit the Lancashire Society on the matter. However, the whole matter had now been disposed of, the Midland Society having decided the matter for themselves.

MR. PRATT'S COLLECTION.

Mr. CLARKSON said the members would remember that at their last meeting it was decided (subject to the approval of Mr. Pratt) to give the Council power to place a case, suitable for the reception of Mr. Pratt's valuable collection of horse shoes, in their General Meeting Room, in the Hotel Metropole. To this course of action Mr. Pratt was agreeable, and the management of the Hotel had acceded to their request. Mr. Pratt had expressed the wish that his collection might be taken care of, and that if the Yorkshire Society tired of the collection that it should be sent to some Veterinary College Museum. To these wishes the Council were agreable.

Mr. WHARAM moved a resolution to the effect that the action of the Council in the matter be confirmed. This was seconded by Mr. Robinson, and agreed to.

With regard to the matter of subscriptions in arrear, the response made to the Council's application—that they should be cleared off—had been particular favourable.

Two names had been struck off the list of members. No nominations for membership had been received since their last meeting.

The resignation of Mr. J. Smith, was accepted with regret, on the proposition of Mr. Wharam, seconded by Mr. Bowes.

PROPOSED KING EDWARD VII MEMORIAL FUND.

A letter had been received by the Secretary from Mr. Shipley, of Great Yarmouth, with regard to this matter. The suggestion was that a Fund be formed, similarly as in the case of the Queen Victoria Memorial. The suggestion is that a fund be formed to provide sufficient money for a pension to one veterinary surgeon, and it was hoped that when Prof. Axe's money was at liberty a house would be provided for the pensioner as well. It was, said the Secretary, for the Yorkshire Society to decide what they would do in the matter.

Mr. MASON regarded this as a time when they might be able to do something. They knew that sooner or later the funds of the late Prof. Axe came in, and he suggested they send a donation from their Society to help the funds of the late Prof. Axe's legacy. He, Mr. Mason, proposed the sum of £5 5s. should be given to the Memorial Fund.

Asked as to the views of the Yorkshire Society's Council in the matter, Mr. Clarkson, said the Council were of the opinion that there would be a considerable amount of difficulty in raising the necessary sum for a pension. It would mean an expenditure of £700 or £800. He personally feared that the amount necessary for anything like a decent pension was more than the profession could raise.

Mr. MASON explained that his idea was that the subscription from their Society and other Societies should be tacked on to the head funds. By this means they would perhaps be able to get together a decent amount of money.

Mr. CLARKSON said the view of the Yorkshire Council had been that it would be wise to leave the matter over until they knew what others were doing.

Mr. MASON replied that in that case he would withdraw his proposition.

Mr. WHARAM thought the question was as to whether the Memorial Fund would go through. He would like to see the Fund started with a larger sum than £5 5s.

Mr. BOWES was certain that all approved of the principle of the Memorial.

Mr. WHARAM pointed out that their existing Benevolent Institutions seemed to be so constituted that the various Institutions were not spending their money. They were simply piling it up. He welcomed any amount of money being raised for benevolent purposes for veterinary surgeons who were in need of it, but whether in the face of existing Benevolent Institutions not spending their money at present, they could raise a sufficient amount for a worthy King Edward VII. Memorial Fund he very much doubted. At the same time he was sure their Society would join with any other Society in supporting any laudable object for the purpose.

Mr. BOWES proposed, Mr. SAMPSON seconded: "That this Society heartily approves of the principle of the suggested King Edward Memorial Fund, but defers discussion on the matter until a further meeting."

The resolution was carried unanimously.

With regard to the amended rules proposed by the Committee of the National Veterinary Association, Mr. CLARKSON said the matter of these rules had been under consideration for a considerable time. The first draft was sent out some year and a half ago. The draft was amended at a meeting held in Manchester, and re-amended at a meeting held in Crewe. The scheme was then submitted to the different Societies, each of whom amended it, and the general scheme was then submitted to a Committee. The Committee sorted out the various points, and drew up a scheme to be presented to the National Association, who, on financial grounds, threw it out. Another Committee was then appointed by the National Association to consider the question of the rules, and this Committee was particularly anxious for an expression of opinion from the various Societies. Up to the present the Societies in the country had received the matter extremely well. The rules which had been altered were not numerous. Mr. Clarkson then detailed the various alterations suggested. The Yorkshire Council thought it would be wise not to make many amendments to the scheme, but to approve the scheme generally. If alterations were afterwards necessary they could be made by the National Association.

Mr. BOWES proposed that the amended rules suggested by the Committee of the National Veterinary Association be approved of. In dealing with the rules, Mr. Bowes pointed out that from the beginning it had been recognised that the crucial point was the financial question. It was impossible for Societies whose subscriptions were small to pay a large sum to the "National" for affiliation, and therefore it had been suggested that a nominal sum should be charged each membee of the different societies affiliated. With regard to the proposed new title of the National Association, he did not much mind it. He knew there was some objection to

the term "Medical" being used, but it was suggested owing to the strong recommendation of the Irish Societies. Their Irish *confrères* obtained their exemption from serving on juries purely on the ground that they were medical practitioners. England was not so well provided for as Ireland or Scotland. Perhaps in time English veterinary surgeons would be afforded this privilege.

Mr. WHARAM did not see any harm in passing the rules as they had been presented to them. He seconded the proposition of Mr. Bowes. With regard to the name of the "National," he (Mr. Wharam) did not care for double barrelled names. They might just as easily put "Surgical" in the place of "Medical" and call it "Veterinary Surgical Society" or anything else. At the same time if it was an advantge to Ireland or to their profession in any part of the country to call it the National "Medical" he did not see any harm in it. He believed medical men in this country received a rebate on the Petrol Tax, and perhaps in time veterinary surgeons would receive it too. With regard to the financial part of the "National" scheme it seemed to have been carefully thought out. It would be well to get the opinion of the "profession" of the country as quickly as possible on the proposed "amended rules," and have the matter settled.

Mr. MASON enquired whether the hopes of the profession was that the proposed amended rules and alterations would increase the powers of the National Society on the lines of the British Medical Society, and bind the members in unity and compel each individual to accept his responsibility as a professional man, on the lines of the British Medical Council.

The SECRETARY replied that was the hope.

The proposition that the amended rules proposed by the Committee of the National Veterinary Association be agreed to was adopted.

SUMMER OUTING.

A suggestion had been made that the Yorkshire Society should invite the members of the Lancashire Society to join with them in a summer outing.

Mr. Bowes moved that Mr. Clarkson, their Secretary, be instructed to write to the Secretary of the Lancashire Society, and if the Lancashire members were agreeable to such an outing to arrange a suitable date and place. The second week in July might be suggested, and Clapham or the Dukeries the place proposed.

Mr. MASON seconded the resolution, which was carried.

SPECIMENS AND CASES.

Mr. WHARAM exhibited specimens of fractured navicular bone, and the hock bones of a Clydesdale mare.

No. 1. Grey Shire mare, about nine years old, 17 hands high.

History. Went lame on near fore, out at work on March 28. The animal had been working in town and the railway yards. Both fore feet were shod with leather. The shoe was removed by the foreman. A wound was found, and the foot poulticed, no nail or anything was taken out of the foot, but the leather which was soft had a corresponding hole in it to the wound.

Seen on 30th, very lame, swelled round the coronet, and up the leg to the knee, wound on sole in the direction of navicular bursa discharging blood-stained synovia.

Treatment. Discontinued the poultices. Dressed the wound with dry dressing. The swelling increased and burst inside the heel. The mare was slaughtered and the fracture found as shown.

No. 2. Bay Clydesdale mare, about 11 or 12 years old, in good condition, never been lame.

History. Went lame on April 1st whilst at work in four-wheeled waggon. Examined by me on the same day. Went on the toe, the hock was very slighlty swelled. No particular pain in any part. Had shoe removed and examined foot, saw her next day (she did not lie down during the night) found hock larger, lameness increased. No sign or history of any external injury. The mare was put into slings and the treatment consisted of anti-flam applications, blister, lead lotion, hot and cold water as indicated.

The hock in spite of all burst on the inside, and she was slaughtered on April 24th. I have not seen the bones until to-day they have been sent on to the hotel. I see the articular cartilage is removed in many places, but the true hock joint appears to be all right.

Mr. BOWES said he was particularly interested in the hock case. It was such a case as one got occasionally, and his experience was that one was never sure what the cause was. He had had a number of cases at comparatively rare intervals, but he had never been able to ascribe the cause of the inflamed hock. They got an intensely inflamed hock, very swollen, and the cases were generally most unsatisfactory. He thought that probably they were what would be described as a sprung hock. There seemed to be an inflammation of the joint. In course of time there was a burst out. He thought the only success he had had in cases of that kind had been with the slinging straight away, and perhaps in the early stages applying palliatives, but generally finishing up by blistering. There was one thing, and that was if the cartilages got lacerated there was, he thought, no chance. It would be interesting to know what the cause was.

Mr. PILLERS was interested in the first case mentioned by Mr. Wharam, because it was associated with railway yards. One might perhaps blame the owner for having a horse shod with leather. If there was anything that predisposed to picking up scrap and getting anything in it was leather. The leathers were nearer the ground, and the nails got on it, and were ready at some future date to be jammed into the foot. He thought himself that leathers were most objectionable, and some of the big people who had a lot of horses in places like Sheffield, where horses often picked up nails, had adopted the plan of having a piece of leather with a steel plate on the top of it relaid to the horse's foot. That worked very well, although there might be some objections to it. When horse-owners lost a lot of working time, had to bear the cost of drugs, and run the risk of losing horses, picking up nails became a very serious matter.

BIER'S TREATMENT.

Mr. G. E. SAMPSON: Mr. President and gentlemen, I wish to bring before your notice a treatment which is not so widely employed in our profession as I think the results obtained warrant. I refer to Bier's hyperæmic treatment of injuries to the distal extremities of the limbs. The treatment consists of limiting the venous outflow from the bottom of the limb upwards, and is brought about by the application of an elastic bandage of the Esmarch's type above the seat of injury, preferably below the knee or hock.

Case I.—A bay cart gelding, eight years old, was reported to have picked up a piece of scrap steel in the near fore foot, about the end of January of the present year. I was called to the horse on February 6th and found a punctured wound on the outer aspect at the middle third of the frog, this had already been pared out and poulticed in the interval. I swabbed out the wound with pure carbolic acid, and ordered antiseptic baths, etc.

On February 17th the horse was walking sound, the shoe was put on for exercise. Two days later great lameness appeared, accompanied by a profuse flow of synovia from the wound, there was great pain in the foot, the horse continually scraping with it. Temp. 104 F., and loss of appetite.

The shoe was again removed, and antiseptic baths

with dry dressings afterwards applied. These symptoms —and a variety of dressings—were continued until March 5th, when the case was apparently hopeless, there being still a profuse discharge of synovia which had also burst out in the heel, the horse was unable to extend the limb, dragging the toe along the ground and exposing the solar surface of the foot to view the whole time. On discussing the case with a friend I decided to try Bier's treatment, applying the bandage below the knee for half an hour twice daily. At first there was no apparent improvement, but by March 16th there was evident signs of a better state of affairs; the discharge was less and the febrile symptoms were abating. From now onwards the case made slow but satisfactory progress, a shoe with a hooked toe having been put on, and I have no doubt that in the course of a couple of weeks the horse will be fit to go out to grass. The diagnosis of the case was not absolutely defined, viz., whether the tendon sheath, the joint, or both were involved, but the discharge was certainly synovia.

Case II.—A six-year-old mare of the black funeral worker type, picked up a wire nail in the near hind foot on February 23rd last. I was called in on March 8th, the owner and shoeing smith having treated it in the meantime. There was great lameness accompanied by febrile symptoms, and a punctured wound on the outer aspect of the middle third of the frog. I at once adopted Bier's treatment combined with antiseptic baths and dry dressings.

On March 17th the discharge, which was at first considerable and suspicious of synovia, had ceased, and the mare walked nearly sound.

March 23rd. Shoe nailed on and the mare resumed work in a few days.

Case III.—An aged brown cart gelding, working in a steel dray, was shown up for treatment on December 19th, 1910, very lame from a quarter sandcrack on the outside of the off-fore foot.

The usual treatment was adopted, and on about December 25th I removed two bony "sloughs" from the wing of the pedal bone. The lameness gradually diminished, but there remained a purulent discharge which I was unable to overcome, even after twice having cut down on the sensitive structures to search for further necrosed tissues.

On March 13th Bier's treatment was applied, and today the discharge has quite ceased, the wall of the hoof is growing down in a sound condition, and the horse is ready for work.

I hope to hear from some gentlemen present their experience with this treatment, so that if their cases have been successful we may adopt the treatment generally, with great advantage to us as a profession.

Mr Bowes enquired whether Mr. Sampson increased the length of the time the bandage was applied, or whether he kept it on the same amount of time, or did he start with a short time and increase it.

Mr. Sampson replied that he continued it half an hour at each end of the day.

Mr. Bowes said he had had no experience of this method of treatment. A friend of his had told him of a remarkable success he had had with this treatment. He had a hunter with a very badly inflamed knee. The hunter had struck the knee, or got a thorn in it. He was lame and in great pain. It was not a case of synovia. He applied a bandage, and gradually increased the length of time. His friend did not use an elastic bandage, but an elastic cord. The application was increased a little bit longer each day. The effect in that case was very remarkable. The improvement started almost immediately. After the first day or two the hunter improved all the way, and the animal got quite right. He had often intended to try the treatment. The possibilities were very great.

Mr. Clarkson said he was glad to hear of Mr. Sampson's success with this treatment. He had had much the same history in one or two cases with pit ponies. He would like to ask Mr. Sampson what kind of bandage he used. The one he (Mr. Clarkson) used was an ordinary human elastic perforated.

Mr. Sampson: It was the same thickness as the ordinary elastic garter, and about the same strength.

Mr. Clarkson said his was a pure rubber one perforated like the one used in human practice for the ankle. He thought without a doubt that each case he had used it on had improved much more rapidly than those without.

Mr. Pillers (Sheffield) thought from the remarks made by Mr. Sampson, he, Mr. Sampson, could give them a very good paper on the subject. He, Mr. Pillers, had tried the treatment mentioned in several cases, and found it to work well.

The Secretary mentioned a case which had recently come under his notice. It was that of a young filly, some three years old. The owners noticed that the filly appeared to be very dazed, and wondered what was the matter with the animal. They called him in. He found the filly distinctly dazed. It was leaning against a wall, and was in very poor condition. He found a distinct enlargement on the forehead. After examination he advised that the animal should be slaughtered. He had brought the head to them for their inspection. He, Mr. Clarkson, thought there was some malignant disease present in the filly.

The Chairman moved a resolution of thanks to Messrs. Wharam, Sampson, and Clarkson for the cases they had presented to them. They had been most interesting ones.

Mr. Bowes seconded the motion. He thought that from a meeting like that with a few cases presented before them, one learned often as much as from a long intricate paper.

The motion was carried.

The Secretary drew the attention of members to the food for beasts provided nowadays. He was inclined to think the foods that animals were living upon at the present time had changed very materially for the worse. Take for instance the case of meals particularly. He had a case the other evening. He was called in to a beast which was eating perfectly well, and in seven minutes the beast was intensely blown up, the muscles were absolutely rigid, the head standing quite out, the eyes staring. When he got to the beast they were drenching her with gin and ginger. The temperature of the animal was 108·6°, but it rapidly fell. He gave an injection. In the morning the beast was all right apparently, and towards evening she cudded. He thought it was some form of toxin that did the mischief.

In another case the beast was apparently well up to a certain point, the temperature became high, the muscles rigid, but in this case the attack did not pass off as the other did. He, Mr. Clarkson, took it that the food was largely to blame.

They met with diseases in pigs nowadays which he was convinced they did not meet with formerly. Whether it was from the adulteration of food or not was perhaps matter of speculation, but he was very much inclined to blame the putting meal and sharps together. What the constitution of sharps was at the present moment he did not know. He would like to know if other members had had similar cases. He was absolutely convinced the foods were adulterated nowadays.

Mr. Sampson said he came across the same thing frequently. He had found in the cases that came under his observation that if they did not kill the animals, they very soon died. A most peculiar thing about the post-mortem was the funny smell. A smell was a difficult thing to describe, but he found in all these cases the same kind of smell.

Mr. CLARKSON remarked that a bad colour was trac ed He took it it was a species of toxin.

Mr. SAMPSON: Poisonous seeds in the cakes, perhaps.

Mr. ROBINSON had had one similar case. The temperature was 108½° F at 4 o'clock in the afternoon. Next morning the temperature fell, and at evening the animal was nicely.

Mr. CLARKSON said in the cases he had referred to the owners were using a mixed feed cake.

Mr. ROBINSON: it was so in the case I iefer to.

Mr. WHARAM had had a lot of cases very similar to those mentioned by Mr. Clarkson. He usually had them at this time of the year—not when the animals were out at grass. He did not know what the cause was, but he thought it was due to some specific mould on the roots, when they were getting turnips and mangolds. These got very dirty in the piles. In every instance the animals he referred to had been receiving roots. As soon as the beasts got to grass cases ceased. He had examined the food. In many instances the animals had been fed simply on what had been produced on the farm, no meal and no cake had been used from any other place. That was one of the reasons that led him to think that there must be some specific mould which would possibly produce a poisonous toxin. It was very much like strychnine poisoning—the animals affected often lost consciousness, and there was a stiffening of the muscles, but perhaps more like an epileptic seizure than anything else. At any rate, such cases were very difficult to deal with. Owners were always afraid that the animals were going to die. They either recovered quickly, or lingered on, and had eventually to be slaughtered.

Mr. DEIGHTON did not think the soil they ate along with the roots would do much harm. He knew the mould did harm. If the turnips got bitten by a hare or rabbit there was a nasty black place left. He knew if animals ate such bitten turnips bad effects followed. He had known beasts die through eating a small piece of rotten food.

A vote of thanks to the Chairman for presiding, moved by Mr. Bowes, seconded by Mr. McCarmick, brought the meeting to a close.

Tea was afterwards served to the members.

Royal (Dick) Veterinary College.

At a recent meeting of the Board of Management of the Royal (Dick) Veterinary College, Edinburgh, it was intimated that the purchase of a site for new College buildings had been concluded. The site, extending to about one and a half acres, is on the east side of the Meadows, and within easy reach of the University. The cost of the new buildings, which will be commenced without undue delay, is estimated at £50,009.

The Diseases of Sheep.

To the Editor of The Times.

Sir,—Mr. G. Fydell Rowley's letter has caused a good deal of interest to agriculturists, especially in sheep-breeding districts. His opinion as to the great loss of sheep in Huntingdonshire being caused by worms is contradicted by Dr. John Harley in a letter wherein he says, "Worms, live or dead, in the stomachs and intestines, or in either alone, do little or no harm to their hosts—witness bots in the simple stomach of the horse and tapeworms in the intestines of the dog." I wonder where Dr. Harley gained this information? Evidently not from available literature, because he would there find it stated that bots are not worms; they are the larvæ of the *œstrus equi*, the gadfly of the horse. Evidently not from practical experience, because any owner of dogs can tell him that tapeworms are far from being the harmless creatures that he represents. Is Dr. Harley prepared to state that the *strongylus armatus* and *strongylus tetracanthus* (red worm) found in the intestines of the horse are harmless? In his second letter Dr. Harley has become hopelessly mixed in cause and effect, and his want of knowledge of the habitat of the different entozoa, their life history, and the losses they cause to owners of animals is surprising. Just to mention one or two points in the letter, I have never heard of flukes or tapeworms being found in the heart or lungs. Flukes are found in the liver, not from being "arrested" by accident but because it is their habitat. The same may be said of the *cœnurus cerebralis*, the hydatid causing "gid" or "sturdy" in sheep, and is the encysted larva of the *tœnia cœnurus*, and attains its mature form as a tapeworm in the intestines of the dog. It is news to me "that there is no disease of man that is not found in sheep and *vice versa*." There are other points I could touch upon, but I think I have quoted sufficient to prove that Dr. Harley's letter is "contrary to knowledge and misleading."

There can be no mistake about the ravages caused by the *strongylus contortus* found in the fourth stomach in Mr. Rowley's sheep. Any one with a practical knowledge of sheep-breeding will tell you the symptoms—viz., irregular appetite, debility, emaciation, anæmia and death. As a result of the anæmia we very often get effusion in various localities, as in the pericardial sac, which often hastens death. These symptoms plainly indicate that the very life of the animal has been sucked by these pests. There cannot be any other cause. The sheep had been well cared for and well fed. Directly these parasites are destroyed the animal feeds better, gets stronger, and thrives even to the extent of getting fat. The importance of an early diagnosis to eradicate worms in sheep or lambs cannot be urged too strongly. The early autumn is a good time to tackle this trouble, as it is at this time of the year so many of these parasites find their way to their hosts. The different anthelmintics employed are frequently disappointing, and when the worms are numerous and well-established in the stomach and iutestines it is difficult to dislodge them. In my opinion this widespread trouble is due to the past two wet summers. Worms can only live for a limited time without moisture. In lambs just now worms of various sorts are very common and causing great anxiety. The *trichocephalus affinis* or hair-necked worm is very prevalent in the large intestines, causing persistent diarrhœa, weakness, and death. This worm is very often accompanied by other worms, a small *strongylus* in the fourth stomach, and even by the *strongylus filaria* found in the air passages, causing hoove. The advantages I found in using the capsules mentioned in Mr. Rowley's letter were—(1) Easily and quickly administered; (2) the medicine being given in a concentrated form gave a much better result than any liquid vermifuge in the form of a drench; (3) the dose of the medicine in the capsule can be largely increased beyond the ordinary dose, which is a very important point.

In conclusion you might ask what I recommend as a preventive. Early administration of medicine and the ploughing up of pastures infested with these worms where practicable.—I am, sir, yours obediently,

CLEMENT BURSTON, M.R.C.V.S.

St. Neots, Hunts, June 27.

DISEASES OF ANIMALS ACTS 1894 TO 1910, SUMMARY OF RETURNS.

Period.	Anthrax. Outbreaks Confirm'd	Anthrax. Outbreaks Reported	Anthrax. Animals Confirm'd	Anthrax. Animals Reported	Foot-and-Mouth Disease. Outbreaks	Foot-and-Mouth Disease. Animals.	Glanders (including Farcy) Outbreaks	Glanders (including Farcy) Animals.	Counties Affected Animals Attacked	Sheep Scab. Outbreaks	Swine Fever. Outbreaks.	Swine Fever. Slaughtered. *
GT. BRITAIN. Week ended July 1	17		22				2	2		1	53	929
Corresponding week in 1910		29		40			4	22		1	43	252
Corresponding week in 1909		21		22			8	37	London 1	1	42	389
Corresponding week in 1908		16		24			16	36		1	66	498
Total for 26 weeks, 1911	475		592		1	18	104	272	Middlesex 1	303	1333	14979
Corresponding period in 1910		810		981			178	501		315	731	6508
Corresponding period in 1909		720		956			299	1171		456	911	8226
Corresponding period in 1908		618		815	3	112	410	1334		629	1192	6068

Board of Agriculture and Fisheries, July 4, 1911.

Parasitic Mange (outbreaks)

IRELAND. Week ended July 1	...	...	...	...	...	...	1	2	10	63
Corresponding Week in 1910 ...	...	...	...	...	...	...	...	1	5	64
Corresponding Week in 1909 ...	...	...	...	...	...	...	2	5	7	100
Corresponding Week in 1908 ...	...	...	...	...	...	...	1	1	10	71
Total for 26 weeks, 1911 ...	5	6	...	...	2	3	44	242	63	974
Corresponding period in 1910 ...	4	7	...	...	1	2	36	333	57	1341
Corresponding period in 1909 ...	3	3	...	...	...	...	49	285	50	797
Corresponding period in 1908 ...	4	7	...	...	...	...	25	265	110	2079

Department of Agriculture and Technical Instruction for Ireland, (Veterinary Branch), Dublin, July 3, 1911

NOTE.—The figures for the Current Year are approximate only. * As Diseased or Exposed to Infection

The Outbreak of Glanders at the Collieries of the Ebbw Vale Co.

A report has been issued by Mr. J. S. Martin, I.S.O., (late Inspector of Mines for the Southern District), and Mr. D. Rocyn Jones, M.B., D.P.H., (County Medical Officer for Monmouthshire) on an investigation they conducted relative to an outbreak of glanders among horses, and the alleged general insanitary condition of the collieries, belonging to the Ebbw Vale Steel, Iron and Coal Company, Limited.

They explain how the enquiry originated through a statement made by Dr. Davies, Medical Officer of Health for the Ebbw Vale Urban District Council, at an inquest held at Beaufort on November 8, 1909, upon a haulier, named John O'Shea, who was employed at the Ebbw Vale Steel, Iron, and Coal Company's Waunllwyd Colliery, that death resulted from blood poisoning having the appearance of "Farcy," and that he had known of a number of workmen engaged in this Company's collieries die from causes due apparently to the insanitary condition of their employment: this statement being followed by a question asked in the House of Commons by Mr. T. Richards, M.P. This resulted in the Home Office requesting Messrs. Martin and Jones to make a thorough investigation into the sanitary condition of this Company's mines.

Accordingly they made a series of visits to the Company's mines, accompanied by Mr. C. L. Robinson (Assistant Inspector of Mines), Dr. T. W. Wade (Assistant Medical Officer to the Monmouthshire County Council), and Mr. D. M. Storrar (Fellow of the Royal College of Veterinary Surgeons and Veterinary Inspector to the Monmouthshire County Council), besides the colliery officials, and made a personal inspection and enquiry above and below ground.

After detailing the sanitary conditions prevailing at the various Colliery workings on the dates of inspection, the Reporters state that during their visit of inspection the stables underground were in each case inspected, and their condition from the standpoints of general sanitasion and the possibility of conveying infection from defective structure or unwise practices were carefully investigated. The stables were in good order, but since this inspection they have been thoroughly overhauled, some being replaced by new ones in order to eradicate any likelihood of infection in the future. As the result of their inspection, the Reporters were pleased with the general sanitation and cleanliness of the stables, and although they were not in all cases ideal, yet very little condemnation could be passed upon them.

Mr. Storrar was told off to investigate the general condition of the horses, with special reference to the presence of glanders amongst them, and on Friday, May 13, 1910, he selected five horses from different pits showing symptoms which, although in no way definite, he considered might be regarded as suspicious, and to these he applied the "Mallein" test with the result that four of them reacted. Upon this result Mr. Storrar was directed to officially report the presence of glanders amongst the Company's horses to the Chief Constable and Chief Inspector for the County of Monmouth, under the Diseases of Animals Act.

A general test of the whole of the colliery horses was decided upon, and to interfere as little as possible with the working of the Collieries and consequent distress in the district, such was carried out at the week-ends in batches, the result of which was that the testing has been much prolonged and this report delayed.

The result of the "Mallein" test has been such as to reveal a very serious state of affairs, which could not be determined by ordinary examination, as in very few

cases, indeed, could there be found any external symptom definitely indicating the disease. It also showed that however well kept a stable may be, if a horse affected with glanders is introduced into a stud, either over or underground, there is very great risk of the whole stud ultimately becoming affected. The total number of horses inoculated, including those of Mr. Thomas, contractor, at Victoria Colliery, was 319, and out of this number no less than 133 reacted to the "Mallein" test, giving definite evidence of being glandered, all of which have been destroyed. Two pits were entirely free from glanders, viz.:—No. 1 Waunllwyd, containing 57 horses, and the Victoria No. 1 Colliery (Mr. Thomas, contractor), containing 32 horses. All the other stables, over and underground, were affected in varying degrees.

The Ebbw Vale Company have taken precautions to prevent the disease occurring again by having every horse tested with mallein before purchase, also frequent applications of the test so as to pick out any animal that may, in spite of care and all measures, find its way into a stud. Although the stable ventilation and general sanitary conditions are above the average of colliery stables, the Company have in every pit built temporary stalls for new horses that have been introduced, to prevent any possible contamination, and also allow a thorough disinfection of the permanent ones, which have had everything done to them which is possible to destroy all infective germs. Wooden mangers have been replaced by iron ones, new floors laid down, and stall divisions erected, all of which is very essential, but Mr. Storrar points out that the great point must not be forgotten, that is, to keep the disease out by means of the mallein test, as it is the only method of detection when it assumes an occult form, as in this outbreak. One of the greatest causes of the spread of the disease is the careless use of the "nosebag," and the common drinking place. Bad hygienic and insanitary arrangements and overwork will not produce the disease, but they will (more particularly overwork) give a great impetus to the spread of the disease once it finds its way into a stud.

The report then gives the result of the investigation into cases of infectious diseases and blood poisoning alleged to have been contracted amongst workmen employed underground in the Ebbw Vale Urban District through the alleged insanitary conditions of the collieries of the Company, and also of typhoid cases amongst colliers for the period covered by the years 1900-1910.—*The Iron and Coal Trades Review.*

Congress of the Royal Institute of Public Health.

TO BE HELD IN TRINITY COLLEGE, DUBLIN, 15TH TO 21ST AUGUST, 1911.

There are several Sections in which Papers will be discussed of general interest, and in one Section, the Pathological and Veterinary Section, matters of special importance to the profession, will be debated. In addition to the ordinary business of the Congress, there are to be entertainments of different kinds for members, such as garden parties, conversaziones, theatres, etc., all of which will be most enjoyable.

We are very anxious to have a representative gathering of the profession, and we should like to know if you will become a member of the Congress, the fee for which is half a guinea.

A. E. METTAM, President of Section.

A. WATSON, E. C. WINTER, } Secretaries.

Members of the Congress are sent a voucher which entitles them to travel for a single fare and a quarter return ticket.

PATHOLOGICAL AND VETERINARY SECTION.

1. President's Address.
2. Diseases communicable from Animals to Man. Professor Craig, M.A.
3. Suggested amendments in the Laws and Regulations dealing with Milk. Sir Chas. A. Cameron, C.B.
4. The Relation of Bacilli of the Typho-Coli Group to Meat-Poisoning and Para-Typhoid. Professor E. J. McWeeney, M.D., M.CH.
5. Contamination of Milk occurring between the Cow and the Consumer. W. J. B. DeVine, F.R.C.V.S., D.V.S.M.
6. Keeping of Animals and their influence on Public Health. W. Cargill Patrick, F.R.C.V.S.
7. Meat Inspection in Rural Ireland—What it is and What it ought to be. P. J. Howard, M.R.C.V.S.

PARLIAMENTARY.

In the House of Commons, on Tuesday, July 4.

FOOT-AND-MOUTH DISEASE.

In reply to Sir H. Verney (Bucks, N., Min.),

Sir E. STRACHEY (Somerset, S., Min.) said: I regret to say that foot-and-mouth disease has broken out at Blands Farm, Hounslow, Middlesex. Of the 76 pigs on the farm at least 42 are affected. One heifer out of the 19 cattle is also affected. All these animals, affected and in contact, will be at once slaughtered, and the usual steps for isolating the infected area have been taken.

Personal.

ROBERTSON.—At his residence, Lismore, New South Wales, to the wife of James A. Robertson, a son.

Mr. JAMES H. THOMSON, M.R.C.V.S., Oban, has been appointed Veterinary Inspector for the County of Sutherland.

The Lord Lieutenant has been pleased to appoint Mr. CHARLES ALLEN, F.R.C.V.S., 35 North Frederick Street, Dublin, and Fortmarnock, Co. Dublin, to the Commission of the Peace for the Borough of Dublin.

OBITUARY.

W. O. ROBERTSON, M.R.C.V.S., Ettrick Place, Selkirk. Graduated, Glas: May, 1892.

Death occurred on June 29th, from meningitis, at the early age of 41 years.

CORRESPONDENCE.

IS IT MEGRIMS, AND IS THERE A REMEDY?

Sir,

Twelve months ago a one-year-old Airedale terrier was treated for distemper. The disease ran an easy course, and recovery was speedy. The only sequel was a slight shaking of the head at infrequent intervals. Lately the head shaking has become a daily occurrence, and is performed with violence, the dog falling in an exhausted state. After a minute he rises and scampers as if nothing had occurred to disturb the serenity of his existence.

His health is excellent, his ears are clean, his teeth are perfect.—Yours, etc.,

June 28. WOODFORD.

ANTHRAX IN THE HORSE.

Sir,

I was much interested on reading Mr. Carter's case of anthrax in last week's *Record*. Most of us have been at different times puzzled to account for some outbreaks of anthrax, especially when cases occur singly and are not followed by others. A recent experience of my own may be interesting.

A client of mine found a fat cow dead (or dying) lying by the side of a brook. He had the animal stuck, and a heavy thunderstorm coming on some of the blood was washed into the stream. When dressing the carcase anthrax was suspected and I was sent for. I found the spleen about three times the normal size, and anthrax bacilli in the blood.

The Police at once fenced off and disinfected the place where the animal died, but a week later a horse which had access to the brook in question died suddenly, and on a microscopical examination I found anthrax bacilli in the blood.

This brook flows for a mile and a half through a grazing district into the Trent, and so on to the Humber. Here seems to me a not unlikely cause for some future mysterious outbreak of anthrax along the banks of this stream.

Another interesting feature of this case is that my client assured me his cats and fowls ate of the cow's carcase without ill-effect, and the butcher when dressing same, repeatedly put his knife between his teeth; beyond a severe fright on learning the nature of the disease, which his friends feared would prove fatal to him, he is, up to now, none the worse.

I may add that both these cases of anthrax were confirmed by the Board of Agriculture,—Faithfully yours,

GEO. WARTNABY.

Burton-on Trent, July 3.

THE CAUSE OF SWINE FEVER.

Sir,

I have now, after several years working in the dark, satisfied myself entirely as to the cause of this disease. It is due to a minute strongyle which burrows into the intestine causing ulceration of the bowels, and a worm in the lungs setting up broncho-pneumonia.

I have often wondered why it has baffled every attempt to eradicate it, and am now satisfied that it is useless to try and do so.—Yours, etc.,

GEO. UPTON.

THE LIMITS OF DIAGNOSIS.

Sir.

So long as our patients are not possessed of the power of speech, so long will our diagnosis of their ailments remain more obscure than in the case of the human subject. The only animal that might have enlightened us as to pain and symptoms when ill would have been Balaam's ass. and unfortunately he is long since dead. It is said that "in much wisdom is much grief, and he that increaseth knowledge increaseth sorrow," and the wider and deeper the diagnostician's knowledge, the more he will appreciate the difficulties in giving an opinion, and the slower he will be in expressing it; but it is no good casting pearls before swine, and the wise practitioner must know his man before he talks much book to him.

Occasionally we meet a worldly-wise, cultured, widely read and educated man, and if we belong to the cocksure crew we cut a sorry figure.

There are two sorts of self-confidence, that of ignorance and that of the man that knows. Unfortunately the first attracts the public by its glamour and assumed omnipotence, but time put the stamp of inefficiency upon it after a period, and the infallible practitioner drops to his true level, whilst his careful and less cocksure contemporary comes by his own and advances in the public esteem.

However it may be in other parts of these Isles, I have found that owners of animals do take some interest in a dead carcase, and if a veterinary surgeon does not attend a post-mortem he is often asked or expected to do so, He would be requested to do so more than he is if his fee for attending a post-mortem did not come on top of the loss of the animal.

The following story seems to me to illustrate the strength of the argument and the value of the evidence against the non-employment of therapeutic measures, drugs included, and the weight of the inferences sometimes drawn from such cases as recover naturally.

A white man kept a goat, a black man living next door to him complained that the goat smelt. The white man retorted that the black man smelt a jolly sight more, whereupon the black man sued the white man for damages for libel. When the goat was brought into court both judge and jury fainted. Having recovered, the black man was called into court to give his evidence. When he entered the witness box judge, jury, and goat fainted. Result: Verdict for defendant with costs on the higher scale.

The inference that some men might draw from this tale is that *all* black men or *the majority* of black men smelt stronger than goats, but the true inference drawn from the story does not warrant any such conclusion.

In out-of-the-way quarters of the world, where coarseness is king and ignorance flourishes, it is always possible to come across the tail shotten, worm in the tail believer, and the cayenne-pepper-giving, onion-to-the-vagina fiend, but these individuals are no great catch as clients, and their conversion to the ranks of the eminently sane would possibly be only accomplished by earthquakes or Gatling guns. As regards money making, I am afraid we must all make as much as we can; most of us have pet ways of trying to make it, differing a bit in degree, but having great similarity in the source and cause of the driving power.—Yours truly,

G. MAYALL.

Sir,

I have read with great interest the article written by Mr. Wallis Hoare on the above subject, and also the reply, if one may so term it, by Mr. G. Mayall.

Now in the first place let me say that I yield to none in my admiration of Mr. Hoare and his articles, and therefore that I am a prejudiced critic right at the begining. But allowing for my little bias, I think that many of your readers must have agreed with his "dicta."

I am quite a junior of the juniors in our profession, but during the last eight years (four in college and four as a practitioner) I myself have had many salutary lessons showing me the extreme difficulty of arriving at a correct diagnosis in a given case.

My first blatant error happened when, as a particularly green assistant, I was dispatched to report upon a case. After a prolonged examination, lasting nearly an hour, and a badgering of the poor owner with needless questions, I returned with a glowing description of symptoms and diagnosis of "general rheumatism." As I wended my way through the maze of symptoms in relating my experience to my master, to this day his tones ring in my ear as he said "I think it is quite evident that the horse has tetanus. I hope you did not mention anything about rheumatism to Mr. ————." The remembrance also comes to me of another day, in College, when one of our professors pointed out to our admiring gaze a lipoma on the side of a dog's chest. It was only a teat placed slightly out of line!

The above are two instances of mistakes, the one of a junior (*mea culpa*), the other of a learned man high in the ranks of the profession, made simply through thoughtlessness and carelessness.

But there are other mistakes one makes, even after one has left the callow College stage, and when one can claim to approach a case viewing it in all aspects, and adopting towards it both a critical and a deductive philosophy, and it is those mistakes which convince us of the limits of diagnosis.

Some time ago I had occasion to visit a cow which, to my mind, presented all the symptoms and had all the history of that phase of cerebral trouble we term stomach or sleepy staggers. The cow had calved a month previously and had been turned out on a patch of clover for the first time that day. She came up gorged with food, and when I arrived on the scene she was standing in a listless state, head hanging, eye sleepy, pulse sluggish. As I watched,

she had an attack of frenzy and apparently seemed in pain, struck at her abdomen with hind legs, glared round the box, and then proceeded to try to produce a small cyclone on her own.

With conspicuous bravery (?) I handled the case, and having administered the usual purgative and other treatment that seemed to apply, I left the place covered with glory. On the following day I discovered her in about the last stage in milk fever! 'Nuff said. She recovered in about 12 hours, I in about 12 weeks.

I have had the pleasure of meeting those lucky individuals who tell me they have never made a mistake in diagnosis. I usually find that it is indeed true, for they have never made a diagnosis. "A chill (beautiful word) on the liver, stomach, kidney, bowels or back," lame in the shoulder," "lame in the foot"—such are the brilliant efforts of those delightful individuals who never make a mistake.

With regard to the use of drugs, may I ask this question? Did any of us ever meet a medical man—doctor or veterinary surgeon—who had risen above the line of empiric or quack, and who had the slightest faith in scores of the drugs in his surgery when they were prescribed for himself by his own medical attendant? We must grant the efficacy of a few drugs, the derivatives and compounds of, say, Ammonia, Opium, Nux vomica, Cinchona, and Iodine. But the rest—!

Take a man who is a bit "off colour," he is prescribed for and receives that old favourite a "bitter tonic"—Quassia, Columba, and that ilk. Now is it not a fact that exactly the same effect could be produced by a half-hour's gallop, or some such exercise, or even by a humble "glass of light bitter, Miss," but perhaps your readers may look on a glass of fo'penny as a medicine, like the old Scotch parson. I don't.

Are we to be told that the country practitioner, of whom I am one, when he solemnly hands out his packet of "condition powder" (Mag. sulph. and sulphur flores, with ferri carb. a trace) and such like medicaments, that he for one moment believes that it will do a whit of good. Believe me he doesn't, and he is very careful to instruct his client of both quantity and quality of food to be given, striving to attain by those means the result he wishes to be credited to his nostrum.

If he does not feel that half of his prescribing is, to use Mr. Mayall's Parliamentary phrase, bunkum, he must have a more brilliant imagination than I possess, and he should give up his work and become a compiler of statistics for the use of Free Trade and Tariff Reform lecturers. He would be the "success of the season."

To my mind we must be honest with ourselves, acknowledge our mistakes freely, try to rectify them openly, administer medicine *a placebo* if we must, but try to encourage careful nursing and dietetic methods to bring about those results which will be a credit to ourselves and our profession, and save us from the degredation of becoming empirical know-alls.

With regard to lameness—may I be permitted to give to Mr. Hosre and Mr. Mayall a little tip told me by a fellow student on the celebration of his third failure at the "final." "When a horse is lame, blister all four legs, you will probably hit the right one."

MOMPARA.

THE OBJECTORS TO THE AMENDMENT BILL.

Sir,

I have read in the *Record* of 24th June a letter by J. P. Isherwood, Headed "The Amendment Bill and the Objectors," in which he expresses the opinion that, "The Majority of the Profession are pretty well disgusted at the address to Members of the House of Commons." That address appears in *The Record* of June the 17th, and as a member of the profession I fail to see where disgust comes in. Mr. Isherwood might also be surprised to learn that the "disgust" is not very wide spread, and that the five gentlemen whose names are appended to the address, are only doing duty for a very large number of members in England, Scotland and Ireland, who have all along been dissatisfied with the high handed way in which the Council has dealt with the question from the first, and although the Bill has been more than once *trimmd* to get free from the opposition of outsiders (the last being the H. and A. Society). Still it is a delusion to imagine that the members of the veterinary profession can be handled any way, and they will have something to say before the Bill as it stands will become law, and I would simply tell Mr. Isherwood that it is not the objectors to the present Amendment Bill, that aim at "destruction," but a few who simply want their own way. I may also state that other Members of Parliament, than those who introduced the Bill, had their eye on it. I agree with Mr. Isherwood and others that money is required, and I also agree with him that a registration fee of 10/6 should be ample. Further, that no increase of students' fees should be made, there are many other points in the present Amendment Bill that require to be dealt with by *the Profession*, and not simply by the members of Council—then we might look for "Construction." For instance, the pertinent question has been asked, what is the Council going to do with £3,000 a year? and what benefits are the outside members of the profession likely to get, or what influence are they likely to have. The present method of electing the Council makes it like one of the old close Corporations, where with very few exceptions, the same men are elected year after year, why not make the retiring members be one year out of office before they are eligible for re-election, and break up cliques. This Bill *will not* be carried without the approval of the general body of the profession, and the simple election of members of Council for general purposes does not give that approval.—I am, etc.,

A. I. MCINTOSH.

Dumfries, 26th June, 1911.

Sir,

As one of the signatories to the Appeal to Members of Parliament, I must take great exception to the remarks of your correspondent Mr. Isherwood. We admit that the Royal College is in want of money, but how much and for what purposes the Royal College has not deigned to consult the profession. According to your correspondent's opinion half the annual sum asked would be sufficient. We say, for argument's sake, £1,000 would be ample for present needs, and an appeal to the profession would have met a ready response. We are not "blinding ourselves to facts," but in the face of the decrease in students year by year, the decrease of practice (there is no question that the ordinary practitioner finds it difficult to get a living and can ill afford fresh burdens), we are aware there is decay and depression which threatens to last for a decade.

Vis unita fortior is a very good motto, but I fail to see how the "unita" is to be maintained by coercion, or the "Vis" made "fortior" by the "despicably mean way" of putting a yearly tax on an already heavily handicapped calling.—Yours truly,

HENRY DYER.

Brompton Road. June 28.

Sir,

But that the gross libel of your correspondent "Mephistopheles" affects some 900 members of the profession, I should have treated his letter with the silent contempt that such attacks from the "Devil" deserve. Your space is valuable and I will be brief—in italics, sir, please, as "I think it deserves the distinction."

I have seen some 600 signed letters from opposers of the Bill, these letters with many more are in Mr. Hurndall's possession and can be seen by anyone wishing to know the TRUTH.

I think it unnecessary to comment on other fabrications of "Mephistopheles," and am content to leave judgment in the hands of all honest men, but at the same time, as Englishmen we all have a right to our own opinion, and ought not to be subject to such sneering and scurrilous innuendos as those produced by such an evil mind as "Mephistopheles," who, by the way, has chosen well his *nom-de-plume*, "Not loving the light."—Yours truly.

HENRY DYER.

Brompton. July 3.

[A point of importance is the date of the letters, which should be known.—ED.]